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T35b

L. 86 NO. 3

textile bulletin

MARCH • 1960

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Over 100 West Point Pacesetters sold since introduction prove

WEST POINT LEADS . . .

☑ **in quality.** West Point's Pacesetter multi-cylinder slasher features the largest cylinder journals, the largest bearings, the largest sprockets, the heaviest frame, the greatest access to warp, a high-capacity versatile size box, and a rugged head end with the best and simplest beam drive.

☑ **in sales.** Since the October 1958 Greenville textile show, more than 90 West Point Pacesetter slashers have been ordered by leading mills. An overwhelming preference for the long-range value of the West Point Pacesetter.

☑ **in installations.** West Point leads the field with more than 200 modern slasher installations in the last four years. We hope you will be able to visit several of these and see for yourself why West Point's Pacesetter is the outstanding slasher in the textile industry today.

Expanding or modernizing?
Stay within your budget with West Point's "step-by-step" plan for better slashing.

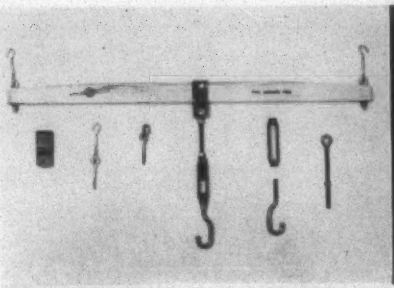
Feature for feature . . .
West Point sets the pace in quality.

WEST POINT *Foundry & Machine Company*
WEST POINT, GEORGIA

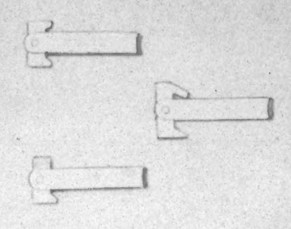
SAVE

TIME AND MONEY

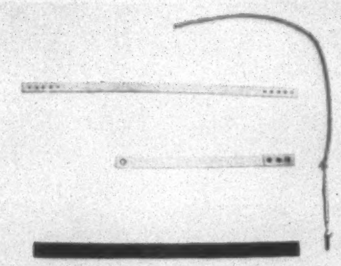
ON LOOM CHANGE-OVER ITEMS



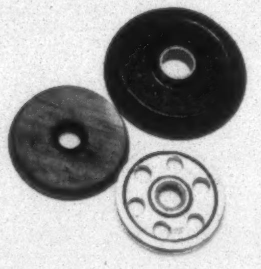
JACKSTICKS AND PARTS



STIRRUPS, LOOPS, JACKEYES

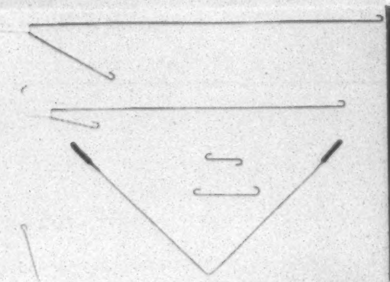


STRAPPING AND HARNESS ADJUSTERS

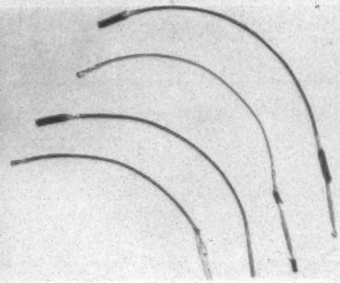


PLASTIC, WOOD, ALUMINUM SHEAVES

WIRES, HOOKS, STIRRUPS



CORDS AND HARNESS ADJUSTERS



THESE ARE ALWAYS "ON THE SHELF"
READY FOR IMMEDIATE DELIVERY

. . . also pull down springs, loom anchoring pads, take up roll covering, shuttle fur.

THE 'P' IS FOR PRONTO!

BATSON HAS THEM . . . and we will send them to you immediately. Orders will be filled the same day received . . . without delay, thus saving you lost time and money. Phone Greenville CEdar 2-7691 and relax — your order is already on the way!

LOUIS P. BATSON Company

P. O. Box 772
GREENVILLE, S. C.

PosiWate

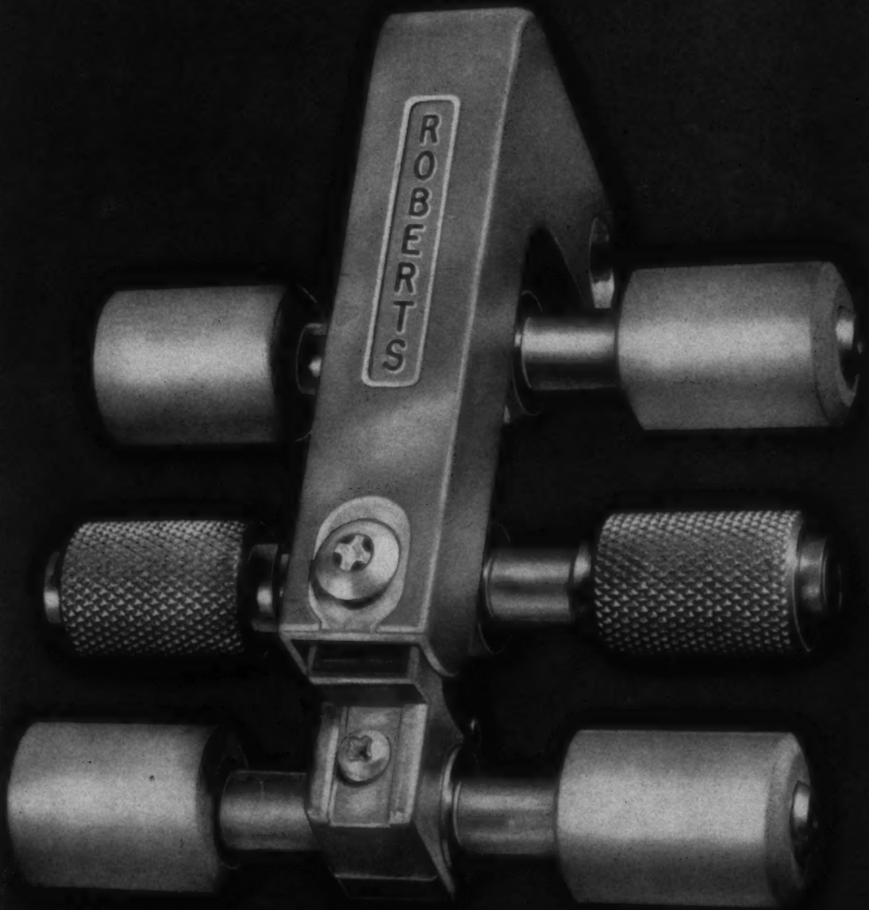
- All three top rolls are ball bearing
- Each roll has two widely spaced ball bearings
- Ball bearings are lint sealed and shielded
- Makes increased weight possible
- Front and back top rolls interchangeable
- Positive weighting and weight distribution
- Same weighting spindle to spindle
- Dead weighting or new cartridge weighting
- Rugged arm pivots on back bar rod
- Exclusive cradle support protects aprons
- Cap bars completely eliminated
- Proper top roll alignment
- Eliminates top arm springs and small parts
- Cots revolve together for easy lap removal
- Standard buffing provides .001 accuracy
- Easy cleaning on roll scouring cycles

ROBERTS

ROBERTS COMPANY
450 Seventh Avenue, New York 1, New York
ROBERTS COMPANY DE MEXICO, S. A.
Avenida Reforma 915-A; Puebla, Pue.; Mexico
HOBOURN-ROBERTS COMPANY; LTD.
Burton-On-Trent, Staffordshire; England

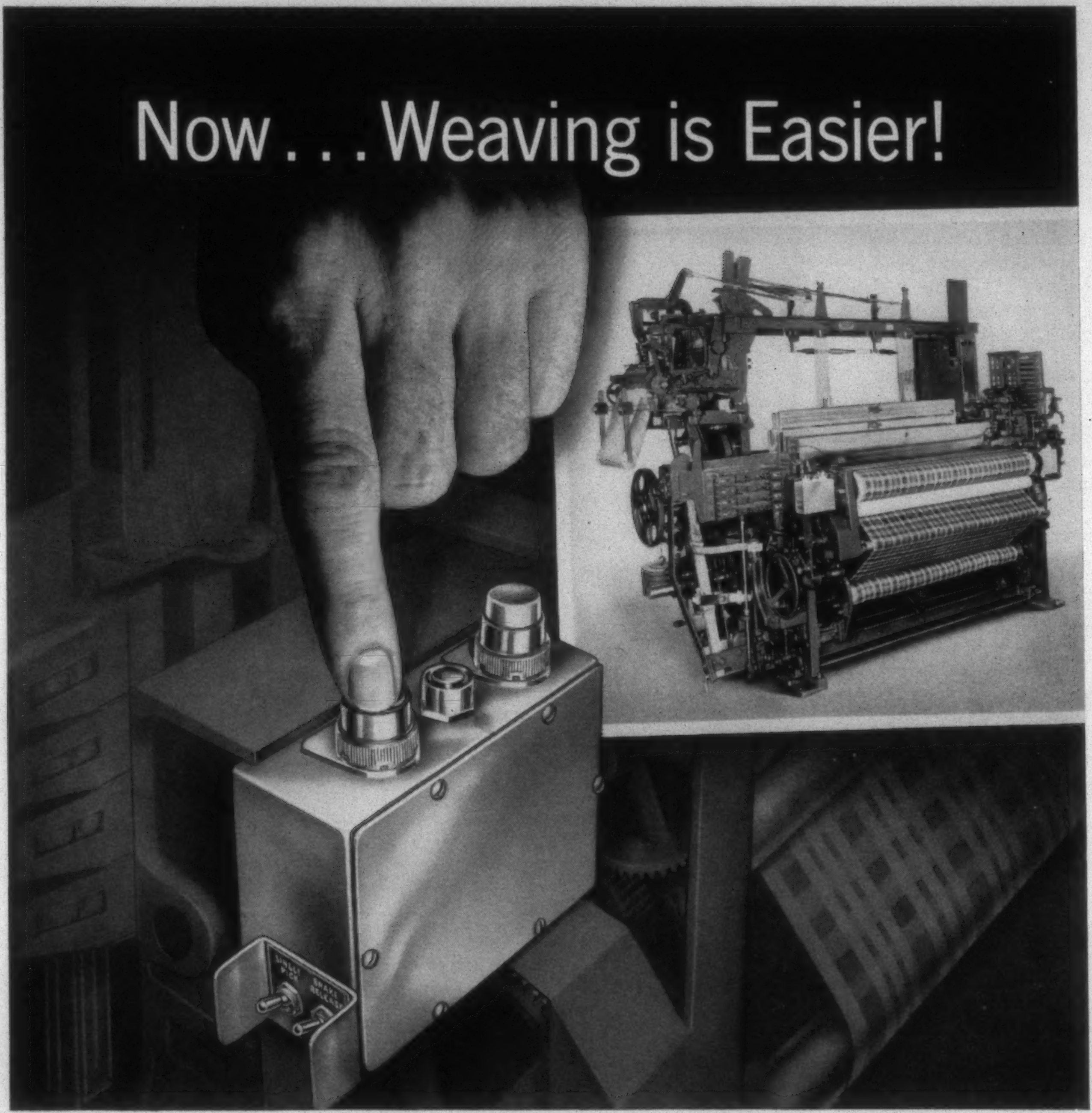
A 160,000 spindle mill thoroughly tested virtually all modern drafting systems for a six month period with positive results. Roberts Double Apron Drafting with **PosiWate** Top Roll Suspension produced yarn with the fewest ends down, best breaking strength and evenness. Besides, it was the best liked by the spinners themselves.

Roberts Double Apron Drafting is making quality yarn on more than 3½-million spindles. **PosiWate** Top Roll Suspension has been installed on more than 200,000 spindles in the past year and is being installed as a changeover for more than 30 frames every week.



PosiWate TOP ROLL SUSPENSION

ROBERTS COMPANY
SANFORD, NORTH CAROLINA



THE NEW C-7 LOOM WITH THE ELECTRIC BRAIN

- ***Simplifies training of new weavers.***
- ***Combined with push buttons, reduces fatigue, lets the weaver spend more time weaving.***

The electric control is convenient, positive, and eliminates the heavy manual work. It's as easy to operate as flicking a light switch. No more shipper handles to pull, no more tugging on the handwheel. For start or stop, there are only two buttons to push. For jog reverse, a third button is used. A flick of a switch is all it takes to change to controlled single pick operation.

A weaver with a minimum of training can operate this loom safely despite high speed.

Lay reverses and shed opens automatically after a broken pick. Less weaver fatigue will help produce better quality and should allow increased work assignments.

A new electric brake and clutch drive has a flywheel effect for steadier operation, especially picking. Electric protection provides time for softer stops. The new electric control is safe. Takes less voltage than a toy electric train.

If you want to boost the efficiency, product quality, and employee morale of your mill, here's a loom that bears investigation.

For fancy cottons, synthetics, terry towels, and ginghams.

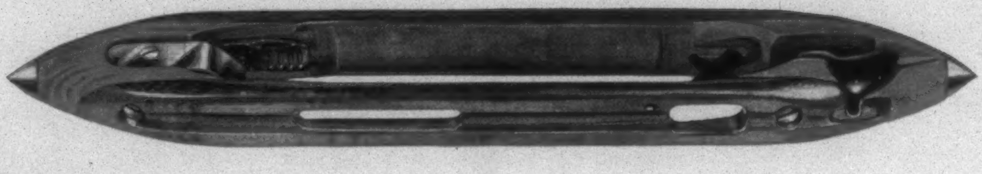
CROMPTON & KNOWLES
Corporation
MANUFACTURER OF
THE WORLD'S LONGEST LINE OF AUTOMATIC BOX LOOMS
WORCESTER, MASSACHUSETTS

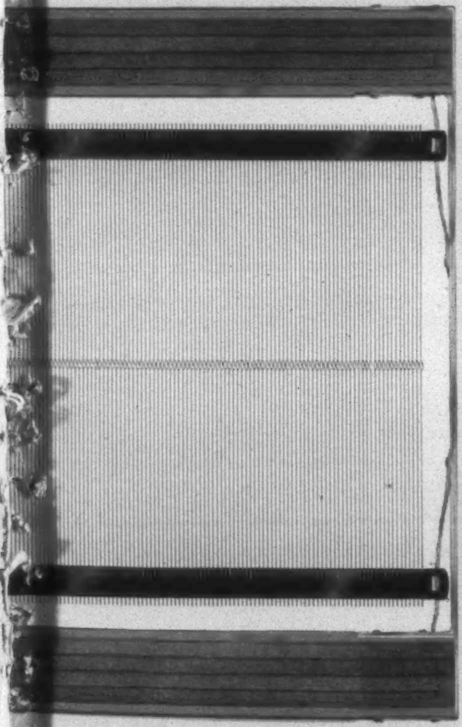
C&K

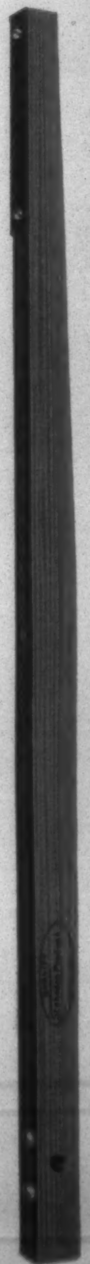
CHARLOTTE, N.C. • ALLENTOWN, PA. • Crompton & Knowles Jacquard & Supply Co. Pawtucket, R.I. • Crompton & Knowles of Canada, Ltd., Montreal, Quebec

NOTHING SO DURABLE AS

DURAWELD





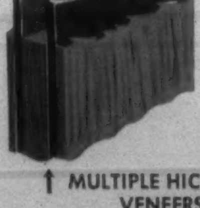


STEHEDCO Duraweld Harness Frames are Premium Grade and guarantee longer life. Each Duraweld frame stick is a lamination of strips of carefully selected, high quality wood permanently bonded together for greater strength and stability. This assures less distortion, warping, and splintering, with greater holding power for hardware, and elimination of weak spots.

SOUTHERN Duraweld Shuttles are made of finest quality tempered dogwood end blocks, for greater resiliency and tip retention, permanently bonded by an exclusive Southern method to long wearing wall sections of laminated wood or plastic. They assure at least 100% longer life expectancy with only a very moderate weight increase.

STEHEDCO Duraweld Picker Sticks provide the unexcelled combination of greater strength and whip, plus resistance to warping. They are made of multiple laminated veneers of high grade hickory reinforced with veneers of vulcanized fiber, permanently bonded with phenolic adhesive into a uniform panel.

Duraweld Harness Frames, Shuttles and Picker Sticks are manufactured with great care under rigid Quality Control methods, and will pay for themselves over and over again with superior performance and longer life. Ask one of our qualified Sales Engineers to show how YOU can start counting your savings when you invest in DURAWELD.



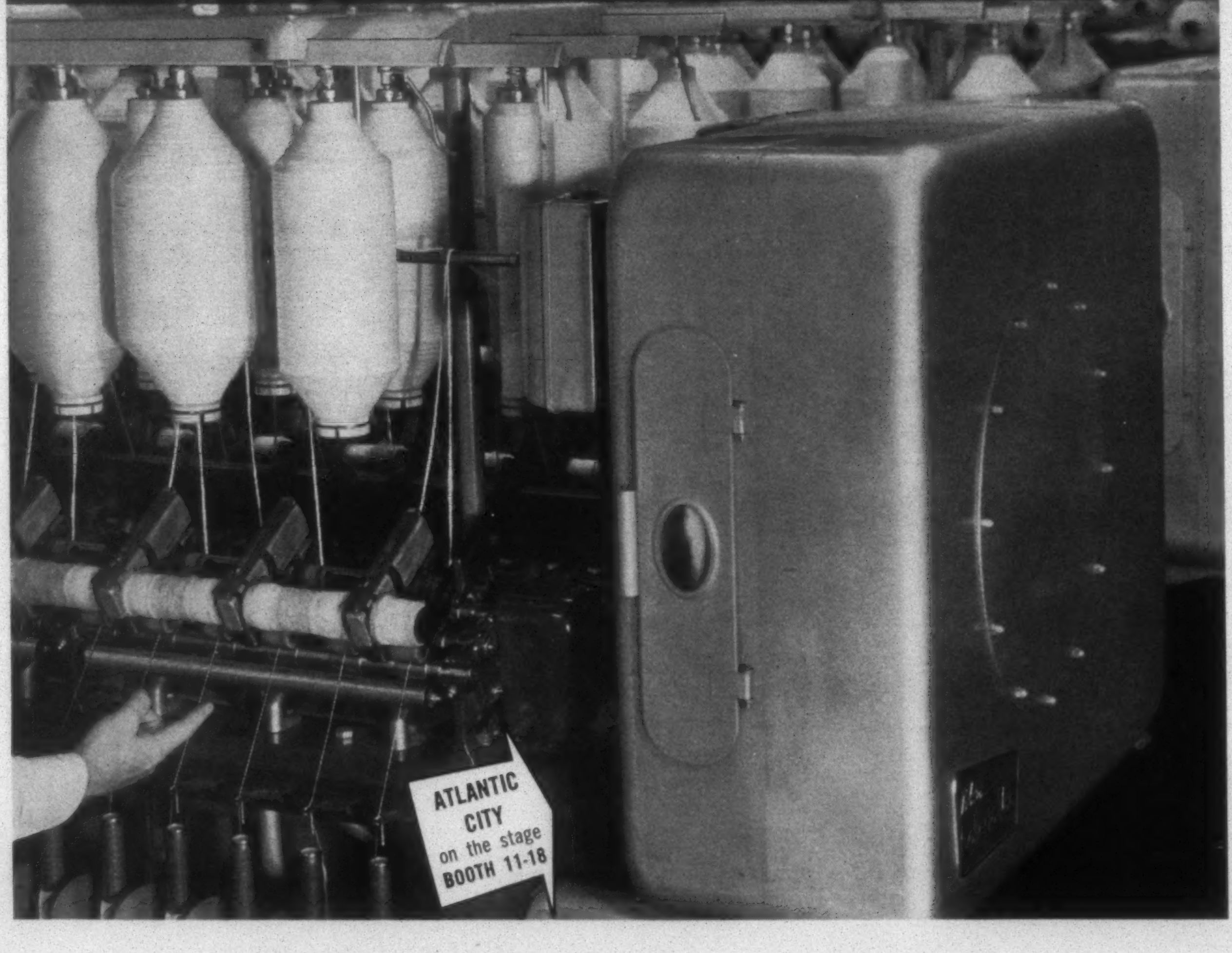
Stehedco
STEEL HEDDLE MFG. CO.
PHILADELPHIA 32, PA.
SOUTHERN SHUTTLE DIV.
GREENVILLE, S.C.
Southern

K-5919

Other Plants and Offices: Granby, Quebec, Canada • Lawrence, Mass. • Greensboro, N. C. • Atlanta, Ga. • Textile Supply Co., Dallas, Texas • Albert R. Breen, Chicago, Ill.

You get additional operating profits with Built-in Economy Features

of BAHNSON COLLECTO-VAC



You can plan for additional operating profits with the extra quality design features of Bahnson's Collecto-Vac for collecting broken ends, lint and fly. Its anodized aluminum flutes neither crack nor warp, thus eliminating replacement costs . . . its rugged all-steel collection box provides durable service indefinitely . . . its scroll type fan gives maximum air handling, helps air distribution in the room by dispersing motor alley heat . . . it has quick, easy access for maintenance.

Collecto-Vac's superior construction enables it to reduce ends down more efficiently, to minimize slubs and gouts, to keep frames and room cleaner. Ask any mill man who has Bahnson Collecto-Vac. Fill in the coupon below for free informative bulletin.

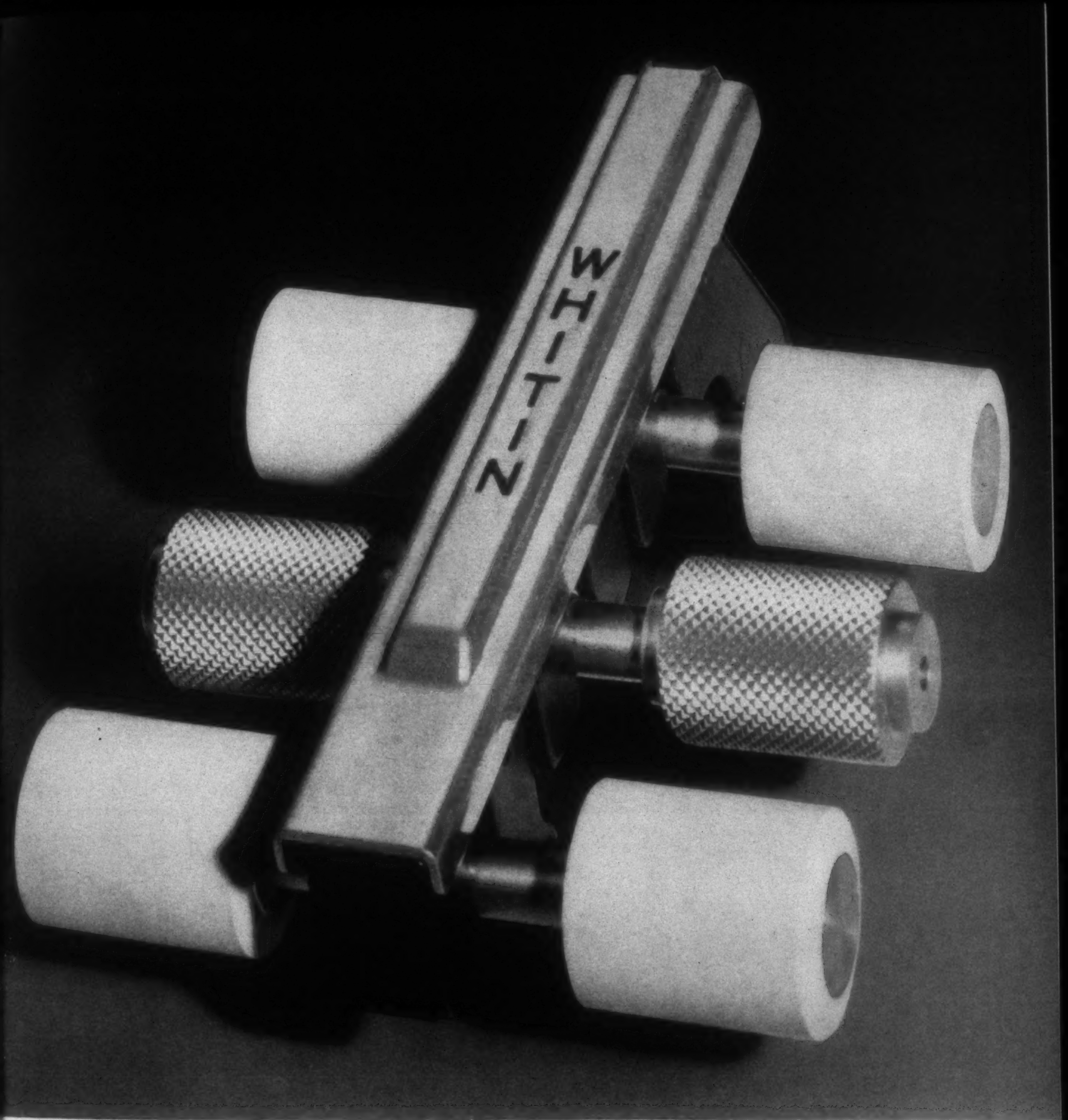
Clip coupon to letterhead. Mail today for Free Illustrated Bulletin 30A.

Name______________________________

Bahnson

AIR-O-MATION

THE BAHNSON COMPANY • WINSTON-SALEM, N. C.



This is Whitin STA. American mills have ordered over 300,000 spindles of it in less than a year. ★ No wonder! It's a new and better top arm weighting arrangement with three lines of ball bearing top rolls. ★ The essence of simplicity, it appeals to practical mill men who have to spin yarn that's really good. ★ Of course, neb blocks and oil in the drafting area are eliminated — that's old hat. ★ Positive weighting, all the time, on all three lines of lint-sealed top rolls — and that's important. ★ Easy to install on your present frames, easy to operate, easy to clean. ★ Mill users report a wide variety of benefits, from higher drafts, fewer ends down and higher front roll speeds, to better break, more uniformity and greater operator productivity. Economical, too. ★ What more is there to say? ★ Only this — It's backed by WHITIN

THE PAST, THE PRESENT... AND THE CRYSTAL BALL

Fifty years ago, American Viscose Corporation became the first commercially successful rayon producer in the United States. While the yarn was brittle and weak by today's standards, and only 362,544 pounds of it were made the first year, the venture was a success from the start. ▲ We'd like to pause for a few moments at this—the beginning of our 50th Anniversary year—to name a few highlights in our progress which may be of special concern to you. ▲ The growth of Avisco rayon has outrun all expectations. There is now 8 times as much rayon used in blends as any other man-made fiber. And of this amount, Avisco rayon's share is well over 1000 times what we produced in our first year. Much of rayon's success can be credited to extensive research pin-pointed to engineer rayon and acetate fibers to fit specific end uses. ▲ **AVISCO ACETATE** was first used in apparel . . . crepe dresses, lingerie, linings. More recently, it has found a place in the home furnishings field especially for curtains and draperies. In 1959, American Viscose developed a new acetate fiber especially for draperies. Fiber 25, as it is known, gives additional bulk, a firmer, crisper hand, an iridescent luster and makes possible unusual textures. ▲ **AVICRON®** rayon, a latent crimped rayon filament yarn, has the unusual property, when relaxed, of drawing into a tighter curl with each washing. This phenomenon opens up a whole new world of texture possibilities. Avicron is now used principally for tufted bedspreads and accent rugs. ▲ **COTRON**[1] fabrics are made of cotton and Avisco rayon. The Avisco rayon in the blend adds to the cotton a luxury of hand and drape, and a clarity and brightness of color. ▲ **AVRON*** high strength rayon was announced only a few months ago, but is already being used extensively in apparel and home furnishings. 100% Avron or Avron in blends has a luxury hand and such strength as to make possible fine-count fabrics which will accept resin finishes. Avron is a major breakthrough in fibers, has important advantages, and is highly promotable. ▲ **SUPER L*** carpet rayon, the new Avisco smooth carpet fiber, is distinguished for its long wear and soil resistance. It can be blended with wool, nylon or acrylics. ▲ **COLORSPUN*** solution dyed fibers are popular for apparel, home furnishings, automotive and industrial products. American Viscose produces a complete line of Colorspun rayon filament yarns and staple fiber and Colorspun acetate filament yarns. ▲ **THE AVISCO INTEGRITY TAG** is awarded to fabrics made with Avisco rayon and acetate fibers, which, by virture of their construction, fiber content, and performance, meet the quality control standards of the Avisco Integrity Program. ▲ It would be interesting to know what is ahead. What we can tell you, without benefit of crystal ball, is that our Research & Development people are working on many new fibers, as yet unnamed, which will be announced during this anniversary year.

AVISCO®

AVISCO®

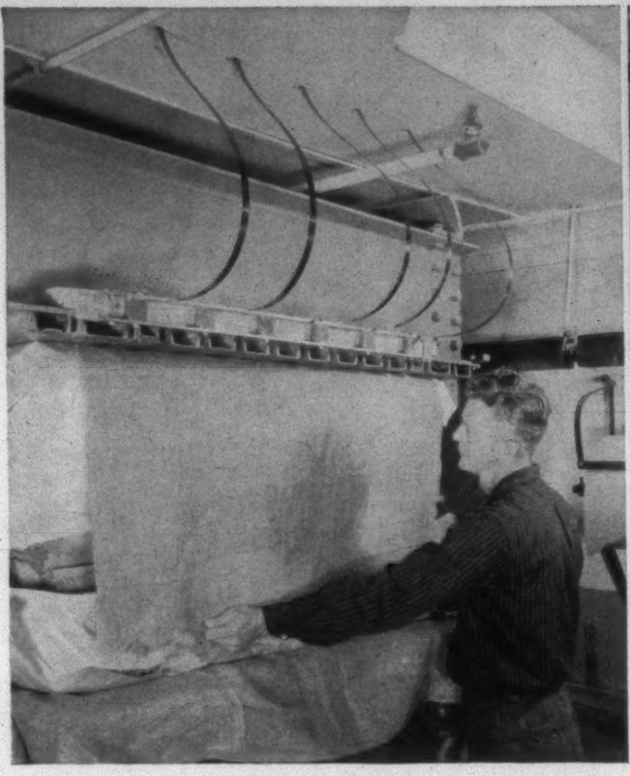
Rayon • Acetate • Cellophane

---

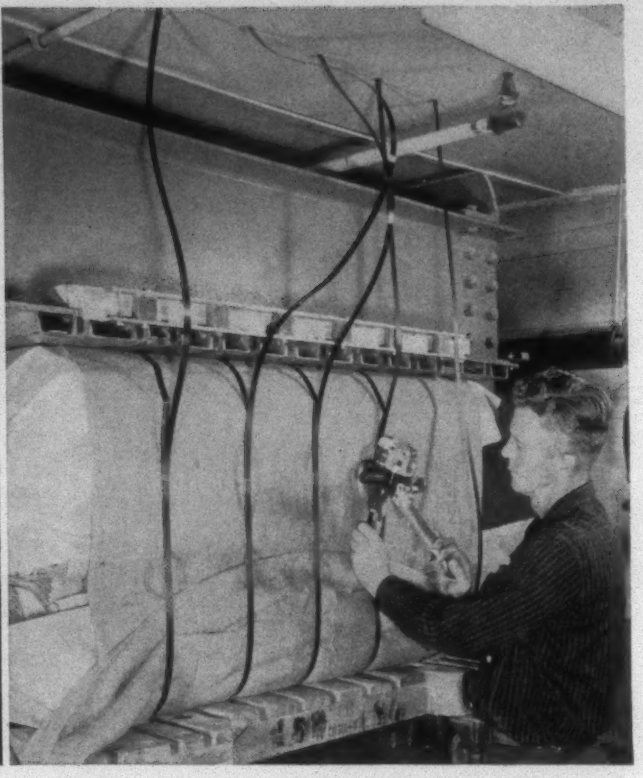
[1] TM AVC for fabrics made of cotton and Avisco rayon

*Trademark of American Viscose Corporation

AMERICAN VISCOSE CORPORATION, 350 Fifth Avenue, New York 1, New York

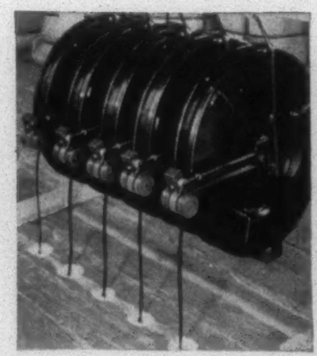


Strapping is fed from dispensers in room above press (inset). A magnetized bar holds the straps in position while bale is readied.

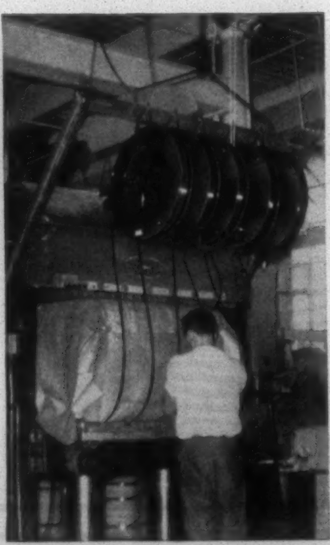


Signode's exclusive Model SFC tool tensions the strapping, feeds seals from magazine, and crimps them. Straps are severed at the seal. No waste strap.

Signode way produces denser bales and reduces strap use by 17%



Strapping dispensers can be in a variety of locations. Above, they are shown set up in an overhead storage area; at right they are shown installed on a framework over the press. They may also be installed on the floor beneath the press or behind the operator.



Here's an example of a simple and inexpensive answer to a packaging problem. Waste—which was part of the former cut-to-length strapping method—was eliminated, with a 17% saving in the amount of strapping used. Bales are better looking. Their increased density saves about 7% of valuable space in storage and shipment. The entire strapping operation is simplified, goes easier and faster.

Why not let a Signode man take a new look at your packaging and shipping operation. He has an eye for savings, specialized knowledge of textile applications, and a complete line of strapping tools and machines at his disposal. Call him today, or write:

SIGNODE

First in steel strapping

SIGNODE STEEL STRAPPING CO.

2665 N. Western Avenue, Chicago 47, Illinois

Offices Coast to Coast. Foreign Subsidiaries and Distributors World-Wide
In Canada: Canadian Steel Strapping Co., Ltd., Montreal • Toronto

NEW! FROM GDC INDANTHRENE MAROON BROWN B INFRA PASTE

distinctively different—a unique advance in vat dye chemistry for self and fashion shades

Developed in the laboratories of GDC, Indanthrene Maroon Brown B Infra Paste represents the most important advance in vat dye chemistry in recent years. Although not an anthraquinone or indigo type, this new GDC dyestuff offers all the desirable qualities of a vat dye with greater economy and a distinctive maroon brown shade unequaled by any other manufactured dyestuff.

gdc
gaf

more than a laboratory development—an important advance in vat dyeing!

INDANTHRENE®
MAROON BROWN B INFRA PASTE

...An original development in vat dye chemistry...A timely fast brown shade that is otherwise unobtainable with a "straight" dye...All the well-known fine qualities of vat dyes, with unsurpassed leveling properties and economy—for the prestige dyeing and printing of cottons and rayons.

INDANTHRENE MAROON BROWN B INFRA PASTE is a development of more than theoretical interest. It is a significant and very useful addition to the dyehouse inventory for running colorfast, fashion-wise shades. The attractive maroon brown tone dyes with the excellent fastness characteristic of vat colors and with top efficiency in dyehouse production.

INDANTHRENE MAROON BROWN B INFRA PASTE in medium depths of shade exhibits a lightfastness rating of 6. Fastness to AATCC Wash Test #4 is rated at 4-5. Fastness to 0.3% chlorine solution is 3-4.

INDANTHRENE MAROON BROWN B INFRA PASTE provides yet another plus factor in its dependable working properties. Speck-free results are inherent from the high standard of Indanthrene Infra Pastes. The color is extremely level dyeing and well suited for regular vat dyeing procedures on conventional equipment. A special printing type is also available. The dye is a "natural" for indoor and apparel shades on cellulosic materials and blends, offering full satisfaction to mill management and consumer alike.

FROM RESEARCH TO REALITY

gdc
gaf

GENERAL DYESTUFF COMPANY
A SALES DIVISION OF
GENERAL ANILINE & FILM CORPORATION
435 HUDSON STREET • NEW YORK 14, NEW YORK
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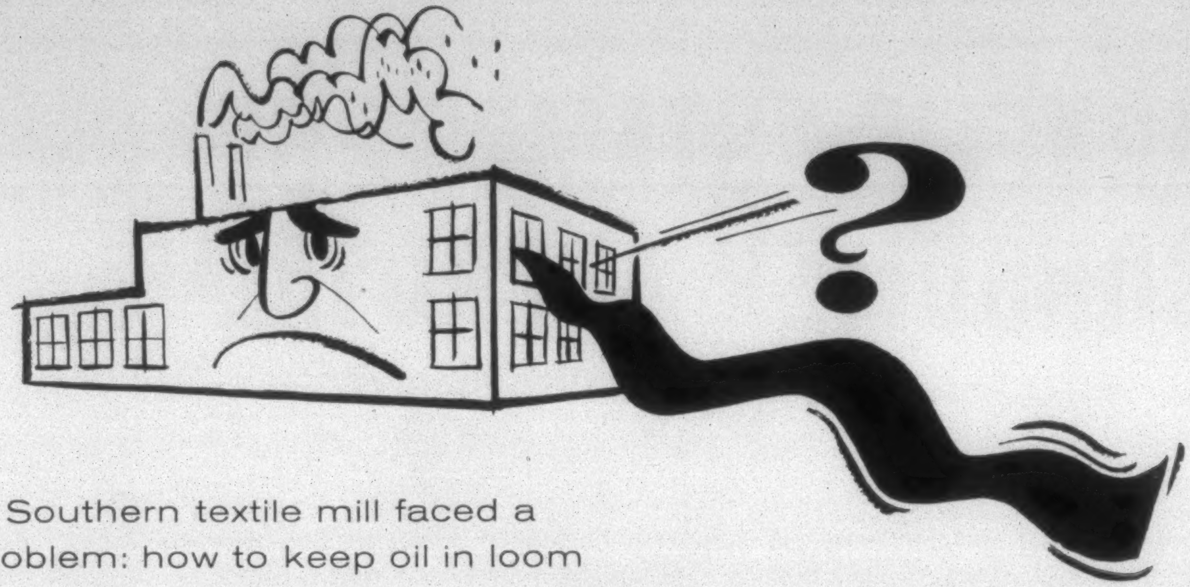
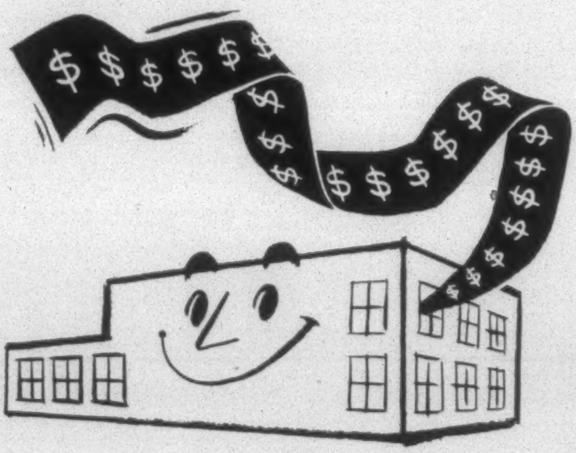
PHILADELPHIA • PORTLAND, OREGON • PROVIDENCE • SAN FRANCISCO
IN CANADA: CHEMICAL DEVELOPMENTS OF CANADA, LTD., MONTREAL

MEMBER VAT DYE INSTITUTE—INDANTHRENE DYES MANUFACTURED BY GENERAL ANILINE & FILM ARE SOLD OUTSIDE THE UNITED STATES AND CANADA UNDER THE TRADE NAME "FENANTHREN" BY DISTRIBUTORS ALL OVER THE WORLD



A Southern textile mill faced a problem: how to keep oil in loom bearings, where it was wanted, and off the cloth, where it wasn't. The oil being used dripped, spoiled fabrics, and cut profits.



A Sinclair engineer recommended Sinclair NO-DRIP #15, combining a light-colored base oil for lubrication with special thickening agent to resist drip and throw-off. Now, cloth spoilage has been cut to a minimum, and lubricating costs reduced by one third. Let Sinclair solve your problem, too. Call your local representative or write

Sinclair

SINCLAIR REFINING COMPANY

TECHNICAL SERVICE DIVISION • 600 FIFTH AVE., NEW YORK 20, N.Y.

8 in a series reviewing the "reasons-why" for the consumer acceptance of Arnel

ARNEL'S "STAMPS" OF CONSUMER APPROVAL

This advertisement is the last in a series highlighting only a few of the really cogent reasons from a consumer standpoint for the success of Arnel triacetate. If you have worked with this fiber you are all too familiar with its adaptability and flexibility through all stages of fabric styling and construction. In the past months, we attempted to remind you of the particulars that the consumer has in mind when he or she buys something made with Arnel.

Not the least of these in this appliance-minded age is TUMBLE DRYING. With Arnel the consumer is assured of satisfaction on this score because:

1. Arnel is naturally very fast drying. It is a hydrophobic fiber.
2. Under the physical conditions found in a tumble dryer, fabrics made with Arnel are extremely resistant to wrinkling and mussing. Remember, under normal conditions, Arnel absorbs only 3.2% moisture.
3. None of Arnel's "ease-of-care" characteristics are at the expense of the other qualities. Fabrics made with Arnel have a desirable hand, beauty and drapeability.
4. All fabrics carrying the official Arnel symbol have been pre-tested for performance claimed—including tumble drying. (Tests are conducted free of charge by the Celanese Fibers Co.).

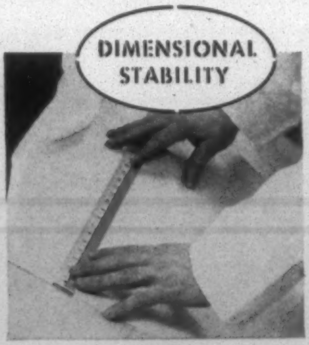
So, take advantage of the great consumer acceptance of Arnel. Let Celanese work with you to develop new Arnel fabrics. Booklets 12A, 13A and 14A, containing the important technical procedure and facts about Arnel, are available by writing Celanese Fibers Company, a division of Celanese Corporation of America, Box 1414, Charlotte, N. C.

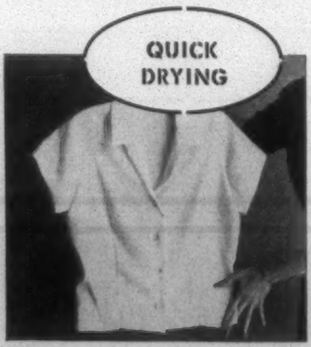
Celanese® Arnel®

District Sales Offices: 180 Madison Ave., New York 16, N. Y.; Room 10-1414 Merchandise Mart, Chicago 54, Ill.; Western Merchandise Mart, Room 478, San Francisco, Calif.; P. O. Box 1414, Charlotte 1, N. C.; 200 Boylston St., Chestnut Hill 67, Mass.; 3131 Maple Drive N. E., Atlanta 5, Ga.

Export Sales: Amcel Co., Inc., and Pan Amcel Co., Inc., 180 Madison Ave., New York 16, N. Y.

In Canada: Chemcell Fibres Limited, 1600 Dorchester Street West, Montreal, Quebec





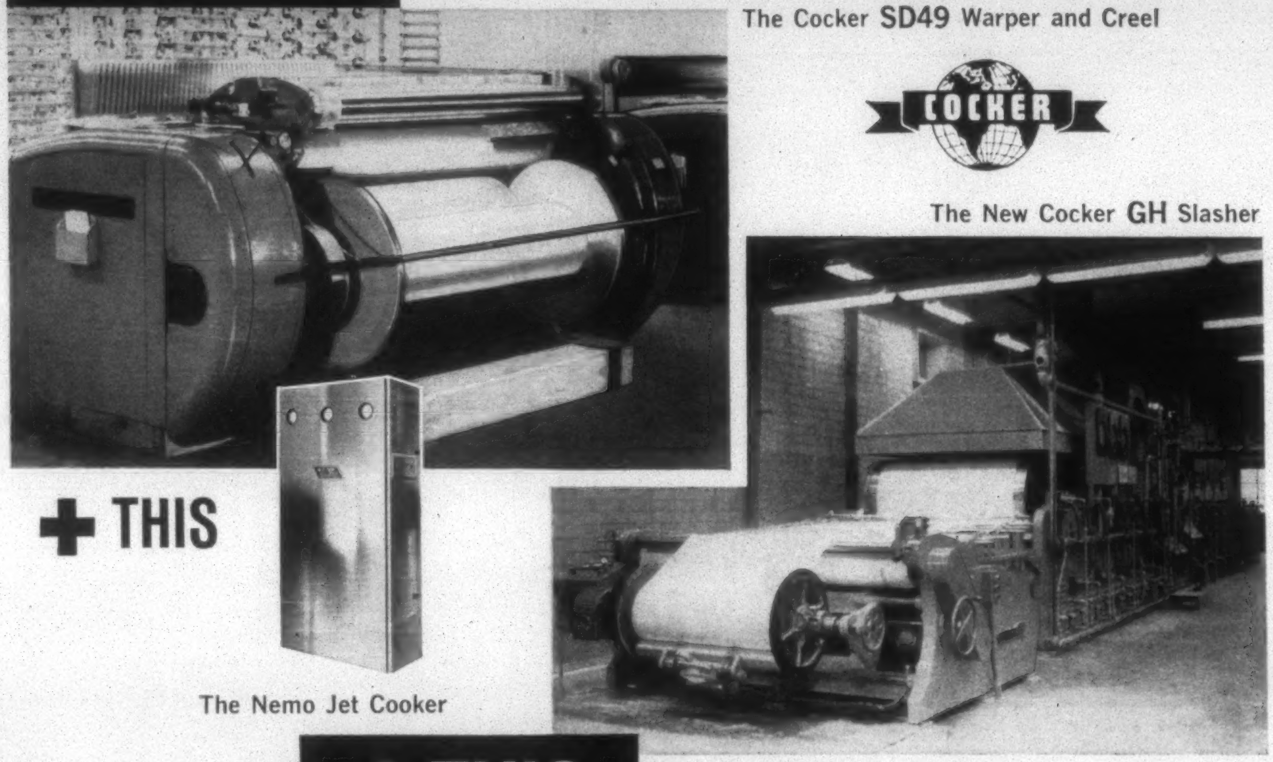
Arnel . . . a

ARNEL*

*This is the official Arnel symbol—evidence that this fabric of this new triacetate fiber has been pre-tested for performance claimed.

Celanese contemporary fiber

THIS



The Cocker SD49 Warper and Creel

COCKER

The New Cocker GH Slasher

+ THIS

The Nemo Jet Cooker

+ THIS

= The World's FINEST Warp Preparation

ONLY COCKER has had experience in all types of warp handling problems, and only Cocker produces all types of warp handling equipment. You get the finest warps in the world with a co-ordinated all-Cocker installation.

- High Speed Rayon Warpers
- Slow Speed Rayon Warpers
- Slow Speed Cotton Warpers
- Ball Warpers
- Gas Warpers
- Snake and Link Warpers
- Vertical Cotton and Rayon Creels
- Horizontal Cotton and Rayon Creels
- Cheese and Spool Creels
- Special Jute Creels
- Nemo Jet Cooker
- High Speed Cotton Slashers
- High Speed Rayon Slashers
- Jute Slashers
- Carpet Slashers
- Tire Cord Slashers
- Heavy Duty Beamers
- Cooking and Storage Kettles
- Coiler and Snaker Motions
- Indigo Dyeing Machines
- Cloth Drying Ranges

47 YEARS IN THE SOUTH

Visit Cocker—Spaces 615 through 620 and 629 through 634 at the ATMA Exhibition

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WORLD'S LARGEST DESIGNERS AND BUILDERS OF COMPLETE WARP PREPARATORY EQUIPMENT

Kosol

NEW COLD WATER DISPERSIBLE HAND BUILDER

IMPROVES HAND OF WASH 'N WEAR FABRICS

KOSOL is a new kind of hand builder. With a branched chain type structure that cross-links more readily with resins. Clear. Colorless. Gives a new fullness to wash 'n wear finishes.

KOSOL takes only minutes to prepare. No cooking. No cooling. You simply disperse in cold water. Add to resin mixture. Then apply to fabric!

KOSOL is compatible with all resins now in widespread use. It's another development of textile research at National. Try it for that little extra that means so much in fabrics. Write or call your nearest National office.

TEXTILE DIVISION

National
STARCH and CHEMICAL
CORPORATION

750 Third Avenue, New York 17
3641 So. Washtenaw Avenue, Chicago 32
87 Haynes Street, N.W., Atlanta 3

NOW... FASTER,
LOWER COST SLASHING MORE UNIFORM YARN SIZING

Photo Courtesy Prescott Warping & Warp Dye Corp.

NEW MANHATTAN SLASHER ROLLS ARE YOUR BEST BUY AT SQUEEZE AND DRESSING ROLL POSITIONS

ONLY MANHATTAN SLASHER ROLLS OFFER THIS COMBINATION OF FEATURES:

- Special synthetic rubber compounds control size pick-up to your requirements.
- Uniform, correct roll density assures *uniform, even* pick-up—the finish *you want*.
- Accurate metering of size permits substantial savings in starch costs.
- Distinctive red roll color permits faster, easier detection of yarn-end breaks.
- Keep perfect cushion *without* indentation—eliminate slasher downtime costs to maintain blankets.
- Roll end-caps prevent metal corrosion between cover and metal core.
- Provide highest resistance to starches, gums, softeners, oils or chemicals. Can be reground for longer life.

Let a Manhattan roll engineer show you how to get "More Use per Dollar" with Manhattan Slasher Rolls. Ask about the new Textractor and Texroc Rolls for maximum water removal and longer life on your mangles.

RM1058

ENGINEERED
RUBBER
PRODUCTS
... MORE USE
PER DOLLAR

RM

MANHATTAN RUBBER ROLL DIVISION • NORTH CHARLESTON, SOUTH CAROLINA

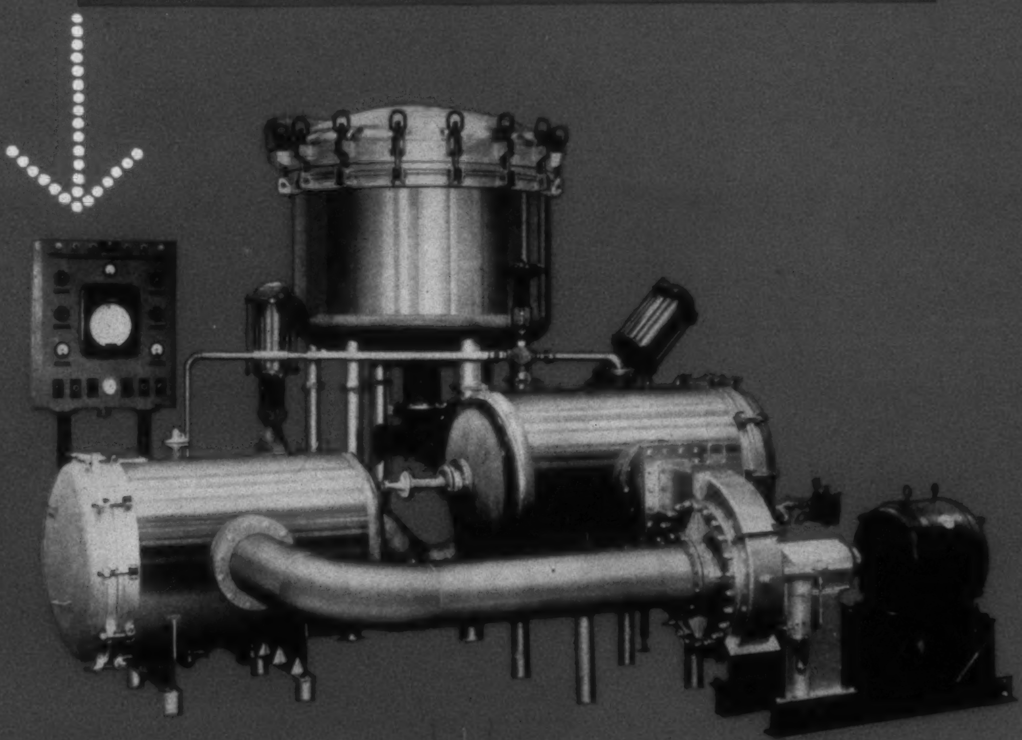
RAYBESTOS-MANHATTAN, INC.

WHY STATIC PRESSURE?

When compared with the best dryer without static pressure, a *static pressure* dryer requires:

LESS THAN HALF THE DRYING TIME

LESS THAN HALF THE OPERATING COST



If dye house production does not require 'super speed' drying our 'Semi-Rapid' dryers without static pressure may be the answer, and the capital investment is lower.

An interview with one of our experienced sales engineers will help you decide which type drying is most suitable for your needs.

GASTON COUNTY

Gaston County Dyeing Machine Co.

WORLD'S LARGEST PRODUCERS OF PRESSURE DYEING & DRYING MACHINERY

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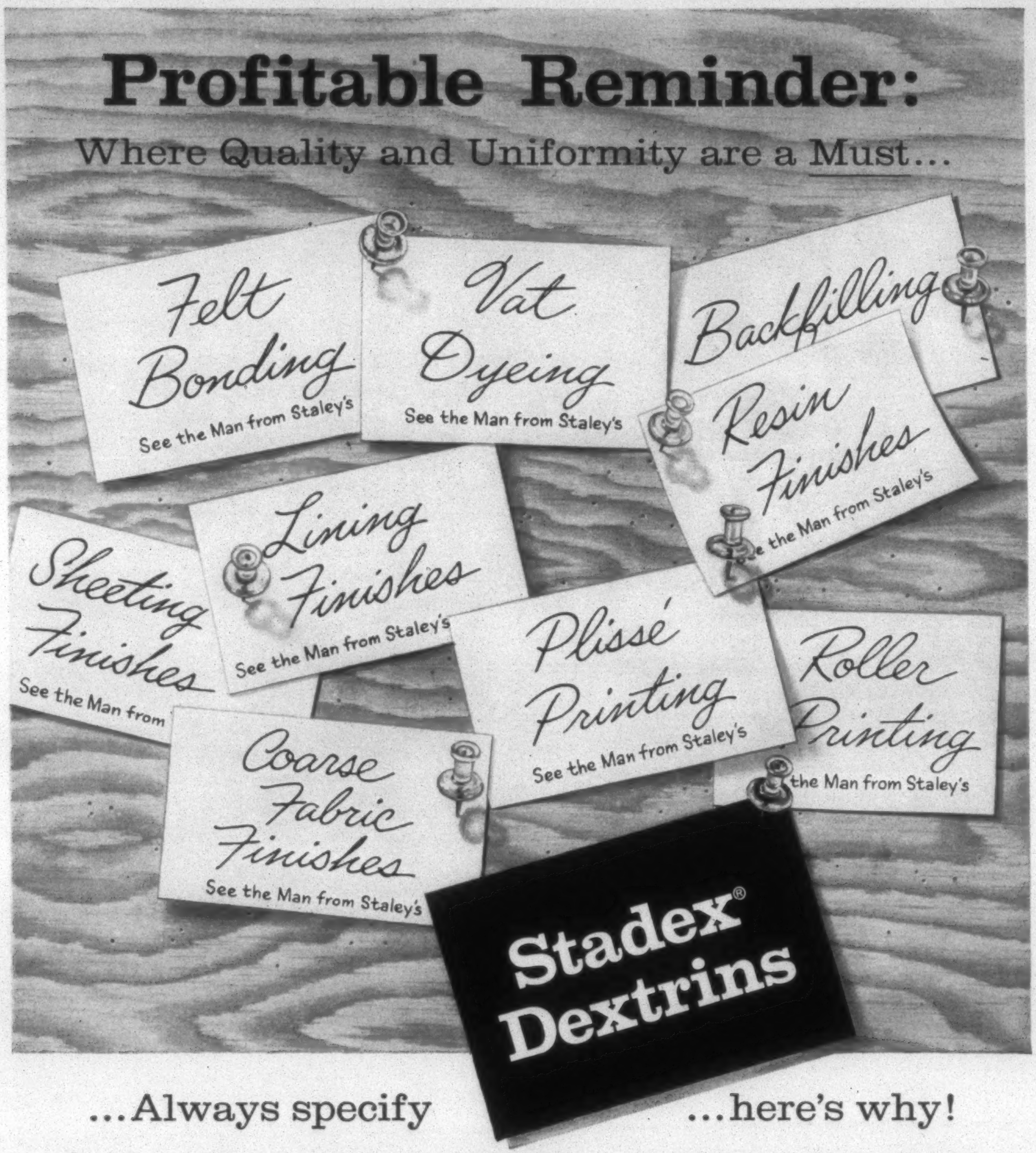
Profitable Reminder:

Where Quality and Uniformity are a Must...



...Always specify ...here's why!

In critical applications, like the nine listed above, variables must be reduced to the minimum if you are to consistently get uniform quality results. And there's no better way to insure uniformity throughout your operations than with Stadex Dextrins.

How is this possible? Staley's has developed an exclusive new process for manufacturing dextrins. And because of this new process, Stadex Dextrins possess a *degree of uniformity not found in other dextrins.*

In printing, finishing, bonding, dyeing—whatever your application . . . whether your requirements call for white or canary dextrins or British gums, remember this: Stadex Dextrins assure you of unsurpassed uniformity, highest quality and minimum color in a complete line *tailor-made* to meet your exact specifications.

For all the details on how Stadex Dextrins can improve your own specific process, see your Staley Textile Representative at the branch office nearest you or write today to:

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SONOCO
"KNOW-HOW"
IN ACTION

Lacquer-tipped cone inspection at Sonoco.

Lacquer-tipped cones—another Sonoco "first"

The first lacquer-tipped cone was developed by Sonoco more than 25 years ago. It provided a new and improved method for yarn identification and gave the industry a smooth, hard nose surface for better yarn processing.

Perfecting the Sonoco lacquer tip required ingenious research and skilful experimentation. Special machinery has been designed and built for its economical production—continuous research maintains its quality.

Sonoco lacquer-tipped cones are typical of the dependable products manufactured by a fully integrated company with 60 years' experience in creating and producing all types of textile paper carriers. Only Sonoco, in its field, provides the necessary knowledge, skill and capacity to meet the ever-changing techniques of the textile industry. Let Sonoco experience help you!

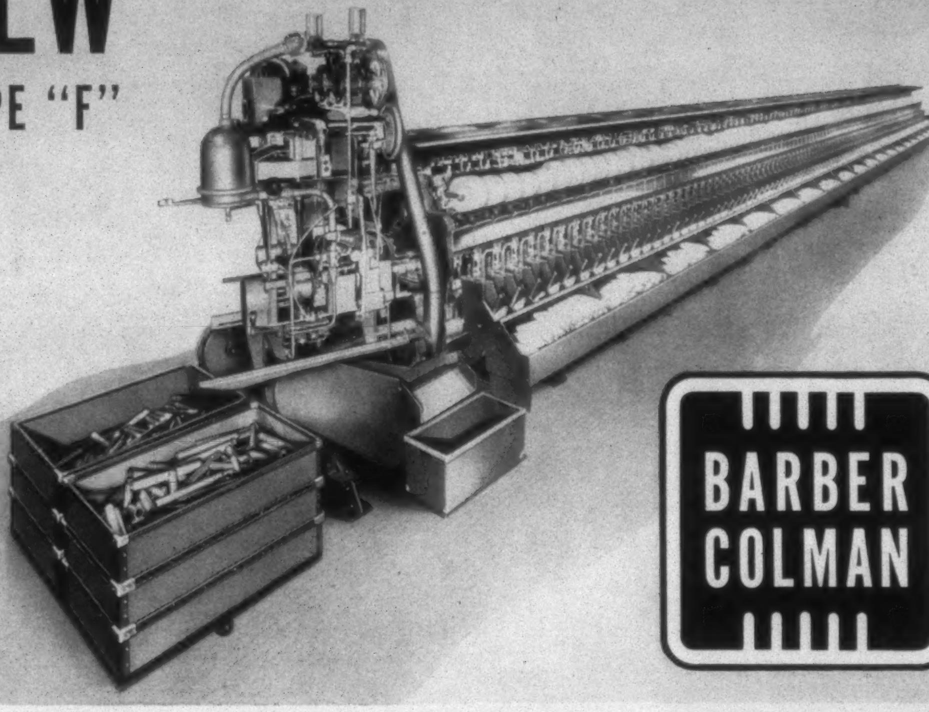
SONOCO
Products for Textiles
SONOCO PRODUCTS COMPANY

ATMA
American Textile Machinery Exhibition - International
Booth Nos. 82 and 83
May 23-27, 1960

Main Office—Hartsville, S. C.· Mystic, Conn. · Akron, Ind. · Lowell, Mass. · Phillipsburg, N. J. · Longview, Texas · Philadelphia, Pa. · La Puente, Cal. · Fremont, Cal. · Atlanta, Ga. · Granby, Quebec · Brantford, Ontario · Mexico, D. F.

NEW AUTOMATIC SPOOLER

TYPE "F"



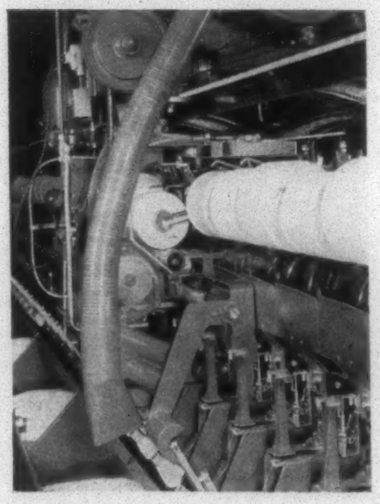
BARBER COLMAN

DESIGNED FOR MODERN SPOOLING FROM LARGE BOBBINS TO LARGE CHEESES

The best features of preceding machines have here been combined with many modern improvements to produce this latest and greatest of Barber-Colman Automatic Spoolers. Increased capacity permits spooling of cheeses up to 6½ lbs. from bobbins up to 12¼" long. Bobbin pockets with movable skewers are lengthened and improved. Permanently-balanced bakelite drums have new crossover double grooves. Quick-set snick plates, one of the finest yarn cleaners ever developed, are easily accessible. Double cheese-supporting arms have built-in brakes. A radical new feature is an automatic sorter that separates empties from tailings bobbins, eliminating any further handling of bobbins after placing them in the pockets. Another valuable innovation is a tape-breaker mechanism, a simple device that greatly improves the build of the cheese. By using the 6½ lb. cheese, production improvements can be achieved in warping, doubling, twisting, backwinding, sale cones, knitting, unifil, shuttleless looms, or quillers. *For full information on how this new Spooler can benefit you, see your Barber-Colman representative.*

SEE IT AT . . .

AMERICAN
TEXTILE MACHINERY
EXHIBITION
ATLANTIC CITY
NEW JERSEY
MAY 23-27, 1960



Above, a close-up view of traveler moving along the cheese row, picking up the ends from the bobbins and tying them to the cheeses.

"EVERY KNOT A TRUE WEAVER'S KNOT"

AUTOMATIC SPOOLERS • SUPER-SPEED WARPERS • WARP TYING MACHINES • WARP DRAWING MACHINES

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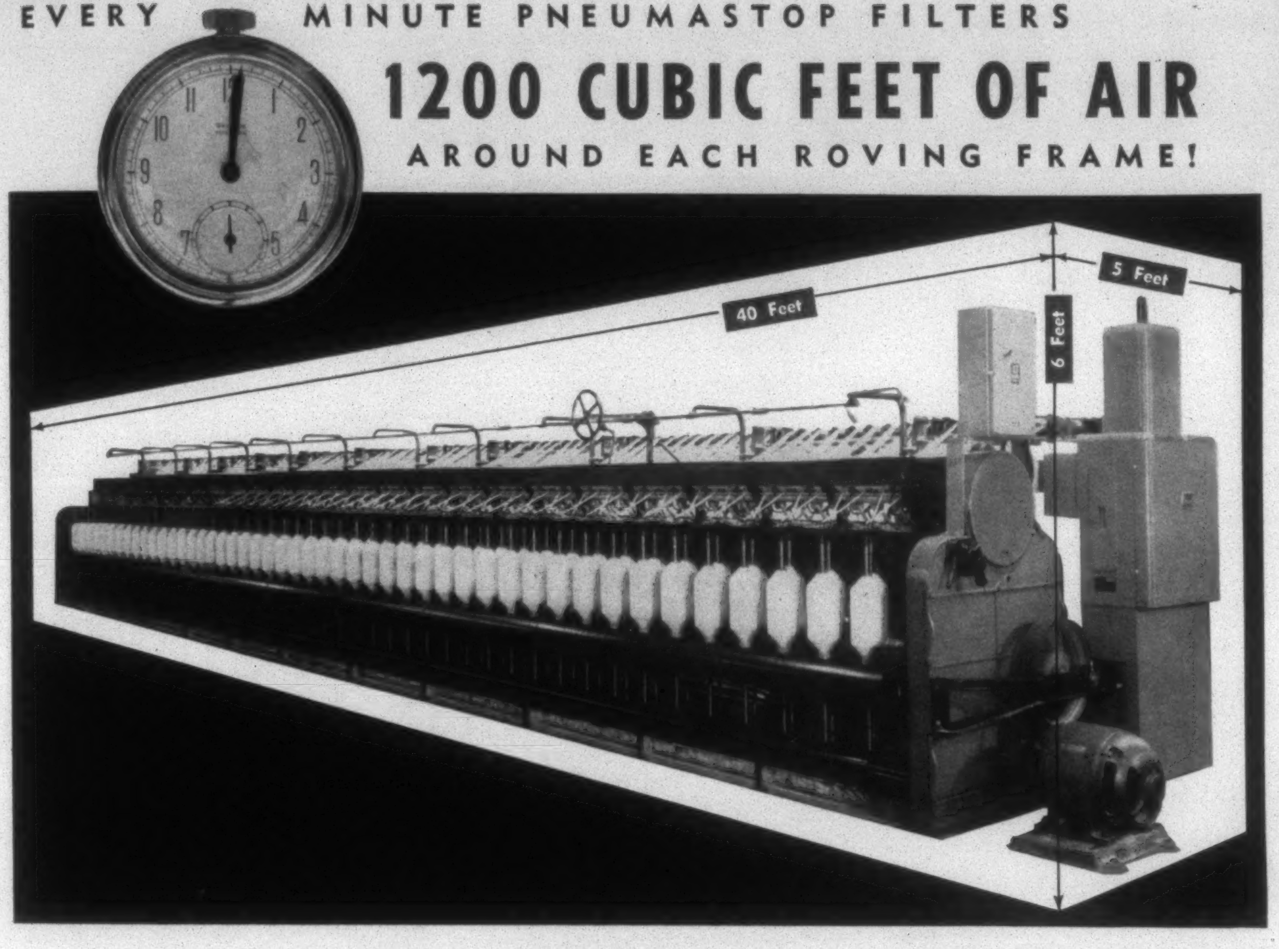
EVERY MINUTE PNEUMASTOP FILTERS

1200 CUBIC FEET OF AIR

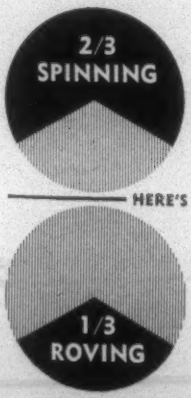
AROUND EACH ROVING FRAME!



1200 cubic feet of air is enough air to totally engulf an entire roving frame!

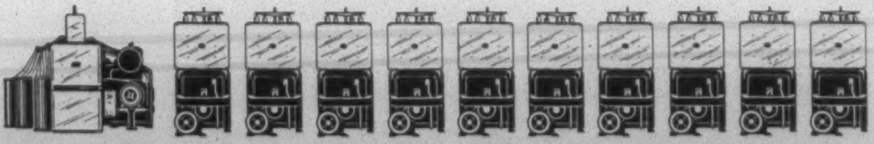
PNEUMASTOP suction cleaning combined with a modern traveling blower system is rapidly becoming the accepted way of keeping roving frames clean. The blower suspends lint in the air and PNEUMASTOP removes this lint with its high capacity filtering unit.

Exhaustive ends down tests (in spinning) comparing "PNEUMASTOP Quality Roving" with ordinary roving prove that savings in spinning costs alone will pay two-thirds of PNEUMASTOP'S cost in just one year!



HERE'S WHERE PNEUMASTOP PAYS OFF

In addition to this, PNEUMASTOP'S dual stop motion with its exclusive features allow roving tenders to handle more frames than with any other stop motion.



Remember this!

One set of PNEUMASTOP improves the running quality of ten spinning frames in the average mill.

For more information please contact . . .

PNEUMAFIL CORPORATION
CHARLOTTE 8, NORTH CAROLINA

Dary RING TRAVELERS . . .
SINCE 1898

THE DARY RING TRAVELER CO.
TAUNTON, MASSACHUSETTS
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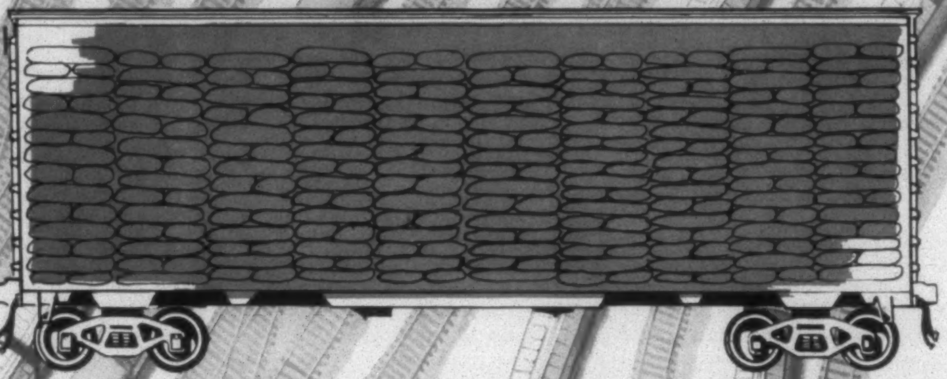
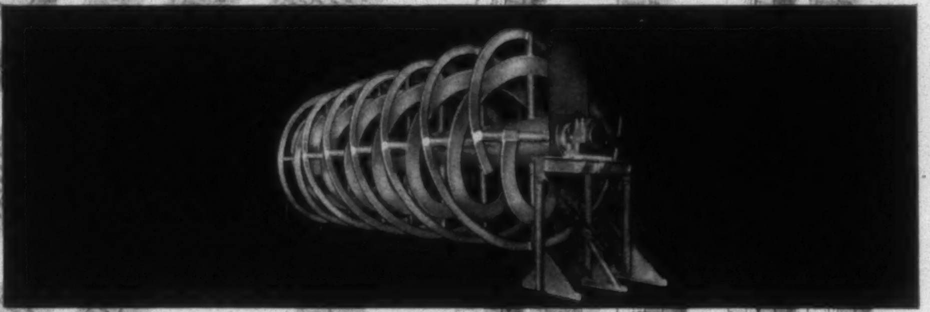
now you can have



starch uniformity by the carload



from the world's largest blender

New Penick & Ford Blender ensures production quantities at pilot plant tolerances

The big advantage of having your corn starches mixed in the world's largest blender is not size of batch, but the perfect starch uniformity you get . . . up to 60,000 lb. with one bag exactly the same as the next. The blender is part of Penick & Ford's new starch derivative plant which is designed to deliver corn products of improved quality and precise uniformity. With its new facility, P & F can offer industrial starch users production quantities to exact customer specifications, no matter how large or small the order. Call

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750 THIRD AVE., NEW YORK 17, N. Y.; 1531 MARIETTA BLVD., ATLANTA, GA.; CEDAR RAPIDS, IOWA; 18 CALIFORNIA ST., SAN FRANCISCO 11, CALIF.

For The Textile Industry's Use

– NEW MACHINERY, EQUIPMENT AND SUPPLIES –

Whitin Spinning Frame

Whitin Machine Works, Whitinsville, Mass., reports widespread interest in its new Standard narrow spinning frame, the unit designed to provide high production spinning at low initial and operational cost.

The Whitin Standard frame is available in 3", 3¼", 3½", 4" and 4½" gauges, with the conventional spindle maximums for each gauge. Traverse is up to 11". The width is 27". It has a new head end assembly containing jack, cylinder, twist, lay and builder drive gearing. All gears are easily accessible, and the wide opening door is equipped with safety locks. The Whitin system of draft gearing is located beside the head end.

The roll stand is inclined at 45° which permits the twist to run up closer to the bite of the rolls. Front to middle as well as middle to back roll settings are adjustable. The stands are equipped with grease fittings for lubrication of the front bottom rolls. Standard equipment on the new frame includes the Whitin STA top arm weighting arrangement and ball bearing top rolls, equipped with revolving clearers for the front line. The STA top arm has precalibrated springs and provides 30-20-30 lbs. pressure on the rolls from front to back respectively. The arrangement is designed to leave the roller beam clear and easy to clean. Bottom rolls are screw-jointed and case-hardened. Evenly spaced flutes are used on front and back lines.

The spindle drive for the new Standard incorporates a newly designed cylinder. Four spindles are driven by a tape using ball bearing tape tension idler pulleys in the usual manner. The frame can be furnished for either S or Z twist as desired. The Standard is furnished with Whitin Pioneer aluminum sleeve, anti-friction, center-base spindles. Whitin Kryton rings are supplied. Ring rails are counter-balanced by heavy springs as required by the length of the frame. The Standard is regularly supplied with a builder and cam for filling wind. Wide use of anti-friction bearings is designed to eliminate the necessity of an auxiliary oiling system.

One of the machine's new features is a balloon control ring and wind down mechanism. Single balloon control rings, one for each spindle, are mounted on a bar running the length of the frame. They are normally positioned at approximately one-half the traverse height. The balloon rings on the entire frame are lowered to the bottom of the traverse easily and quickly for doffing by turning a crank located at the head end.

Maximum utilization of floor space is permitted by the unit's 27" width. In many instances approximately 25 to 30% more spindles of Whitin Standard spinning can be installed in the same space occupied by present conventional spinning. The reduction in floor space required, combined with higher production offers substantial increases in yarn from the area assigned, Whitin points out.

A built-in vacuum waste collector system is an integral part of the machine design. This design feature is said to permit most efficient function of the collection system and utilization of space.

A conventional four-spindle tape drive with anti-friction tape tension idler pulleys is employed on the Standard. A reinforced 8" cylinder was especially developed for this frame. Cylinders are dynamically balanced at speeds in excess of normal operational speeds, and the cylinders are internally strengthened and constructed with a new seaming method.

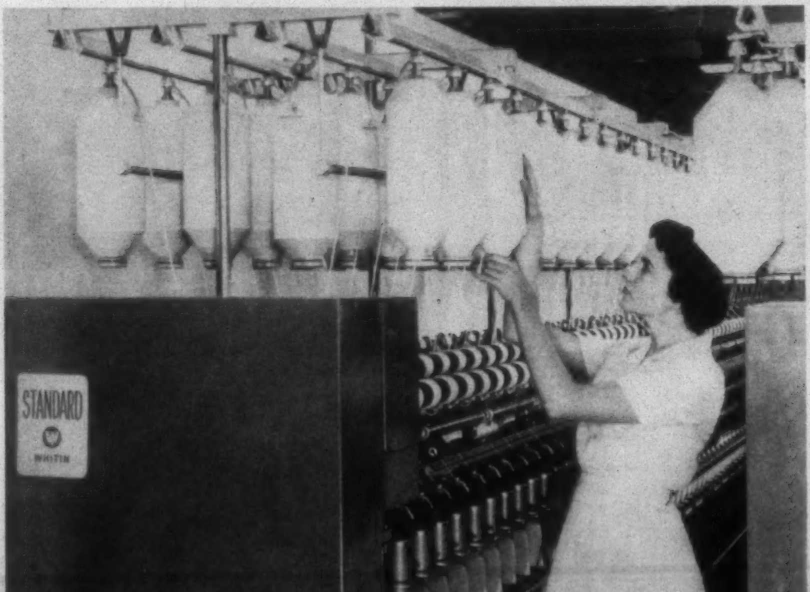
A 1" spindle whorl is used, which increases the ratio of whorl to cylinder (7.80:1), effecting a reduction in cylinder speed.

Whitin Pioneer spindles provided are equipped with brakes for gauges 3½" and larger.

Also included are revolving top clearers, traverse motion, traversing thread board, thread guides, separators, three-shift hank clock, traveler cleaners and 15 h.p. textile motor and a drive. The motor is located under the foot end of the machine and furnished with a vari-pitch pulley providing a 2:1 ratio. Modern, open umbrella type creels are supplied for single roving. Casablancas bobbin holders are employed.

Whitin Unitrol top arm and top rolls may be specified at additional cost if desired. In the Unitrol top arm and weighting arrangement: front top rolls have anti-friction bearings; middle and back rolls are non-lubricated.

Other optional equipment includes double creel and additional bobbin holders for double roving, a straight builder for warp wind with 9" maximum frame, a combination builder for warp wind of 9" maximum traverse, or for filling or combination winds up to 11" traverse, reversible twist and Bijur lubricating system for two bearings in the draft gearing and gear teeth on the head end. (Request Item No. C-1)



Whitin's new Standard spinning frame is 27 inches wide and features single balloon control rings, vacuum collection system and 45-degree angle adjustable roll stands.

Selvage Shear

A new selvage shear has been developed and placed on the market by the Curtis & Marble Machine Co., Worcester, Mass., and Greenville, S. C. This machine has been designed and developed to meet the needs of a high-speed precision selvage shear to shear the fringe filling yarns extending from the cloth selvage on either one or both sides. While it was primarily developed to shear the selvage of cloth woven on the new Draper shuttleless loom, field testing is said to have proved it to be greatly superior to any other selvage shear the company has produced on all types of goods from lightweight gauze to heavy denims, terry toweling, blankets and sleezy glass fabrics.

The most radical change in the unit, according to the company, is that it is operated by compressed air with a hydraulic cylinder and the guiding of the cloth through the 6" cutting parts is positively controlled at all times.

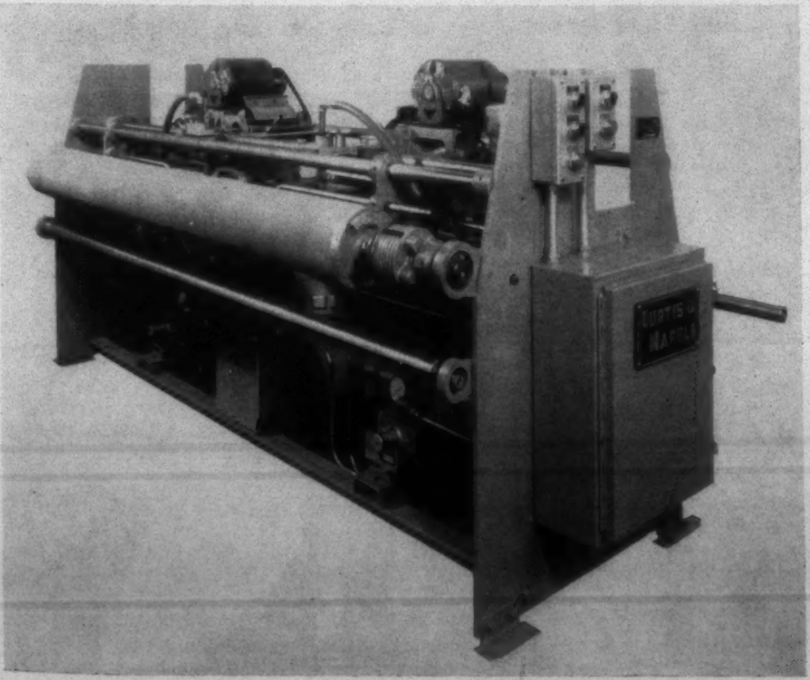
In operation, the selvage of the cloth travelling in a horizontal plane interrupts an air stream in the gap of the edge detector which is adjustably mounted with the shearing head. When the selvage interrupts approximately 50% of the air stream, the relay is in balanced position and the hydraulic cylinder, which guides the shearing head to the cloth selvage, is stationary. As the selvage moves laterally within the detector it allows more or less air to reach the relay which, through the hydraulic cylinder, automatically re-establishes the correct shearing position. As the edge detector is adjustably fastened to the shearing head, it may be set to shear to any residual fringe length from 1/32" to 1/4", and thus meet any particular fabric requirement.

As the selvage edge is detected in an air gap there is no mechanical distortion of the selvage such as has been experienced with mechanical feelers. Depending upon the type of fabric to be sheared, speeds of from 60 to 110 yards per minute can be obtained on either one or both selvages simultaneously, the company reports. This shear can be used as a part of a cloth finishing range, or operated as a separate unit with scray and rolling machine. Widths of fabrics from 14" to 120" can be sheared with single or double unit cutting parts. The S.L. Selvage Shear is being manufactured to take goods in all standard widths from 50" to 120". The machine has a body of steel plate and structural steel; the shearing revolver is of file edge and cuts against a special heat treated alloy steel blade. The entire cutting assembly is mounted on ball bearings which move along hardened and ground shafts. The entire shearing unit may be removed to facilitate grinding or repairs. The revolver is oiled by means of two felts and a leather which are held in place by two guards which form an oil groove which is above the revolver. All machine bearings, as well as those of the motor, are sealed and packed for life to assure minimum maintenance. The S.L. Selvage Shear to take goods up to 50" in width requires a floor space 74" in width, 34" in length and 42" in height. The machine will be featured at the coming A.T.M.A. Exhibition at Atlantic City in May. (Request Item No. C-2)

Convected Oven

The Electric Hotpack Co., Philadelphia, Pa., has introduced a new mechanical convected oven designed for short heat testing, drying, analytical work and other temperature testing and conditioning processes vital to the textile industry. Temperature range of the unit is 35 to 350 C°. (662 F°.). A calibrated thermostat dial allows direct setting of desired temperatures and controls setting within 1° C. over the full temperature range.

A wattage selector switch regulates input heater wattage and eliminates heat surges. An automatic overtemperature controller breaks the heater circuit in the event the chamber temperatures exceed control setting thus preventing costly damage resulting from overheating or unauthorized thermo-



The most radical change in Curtis & Marble's new selvage shear is its operation with compressed air.

ATMA

Parade of Progress

JOIN THE PROFIT PARADE! VISIT CONVENTION HALL IN ATLANTIC CITY, N. J. IN 1960* AND SEE THE WORLD'S LARGEST COLLECTION OF ADVANCED TEXTILE MACHINERY. OVER THREE HUNDRED (300) EXHIBITORS WILL DISPLAY OVER THIRTY MILLION DOLLARS ($30,000,000.00) WORTH OF MODERN EQUIPMENT. RECENT ADVANCES IN TEXTILE CHEMISTRY WILL BE MATCHED BY THE LATEST MECHANICAL DEVELOPMENTS.

ALL UNDER ONE ROOF! PLAN NOW TO JOIN THE "PARADE OF PROGRESS" IN 1960*.

American Textile Machinery Exhibition International

MORE THAN 300 EXHIBITORS, UNDER A SINGLE ROOF, WILL DISPLAY THE LATEST TEXTILE MACHINERY AND TECHNIQUES.

*MAY 23 - 27, 1960
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Ideal Flyer Reconditioning Service Assures Perfect Bobbin Build

Your worn flyers, spindles, pressers, and bolsters are *completely* rebuilt to standard specifications at a fraction of the cost of new equipment. All parts are guaranteed to work in perfect harmony and to produce bobbins of uniform size, length, and density with no top or bottom runovers. This service includes:

FLYERS Noses and barrel hubs realigned . . . barrel hubs die-swaged *full length* and reamed to standard taper . . . legs repaired and reinforced . . . worn ends rebuilt and refinished . . . flyers reblocked . . . your choice of finishes . . . and Selecto - Speed Balancing* for smooth running *at all practical* speeds.

PRESSERS blocked with proper curve and balance, or replaced.

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ADJUSTABLE SPINDLE STEPS produce uniform bobbins regardless of wear or inaccuracies in other parts.

FOR EXTRA FAST SERVICE Ideal now carries large stocks of flyer assemblies in most popular makes and sizes and can ship promptly—allowing you a generous trade-in value on your old equipment. Let us give you full information and prices.

*Patented

Ideal Machine Shops, Inc.
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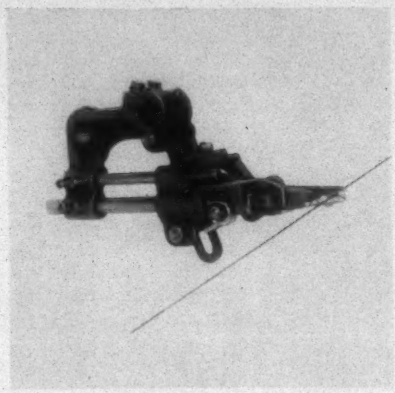
Continuous Service to Textile Mills Since 1925

stat adjustments. The control panel is recessed and protected by a sturdy plexiglas cover. The cabinet is constructed of heavy gauge enameled steel. The interior is finished with 18-8 gauge polished stainless steel. (Request Item No. C-3)

New Thread Cutter



The new HFL Filling Holder and Cutter, Series 8300, holds filling of any size and type firmly and in a straight line before, during and after cutting to prevent drag-ins. The photo shows the retainer plate cut away to expose the action of the gripper and cutting blades.

The H. F. Livermore Corp., Boston, Mass., has developed a new Series 8300 filling holder and cutter, designed to provide an effective solution to the costly problem of seconds resulting from drag-ins and sidelines caused by wear or lag of fiber holding blades. The unit represents a complete departure from the conventional thread cutter in action and material, the company reports.

The new part can accommodate—without adjustment—all types and sizes of filling (cotton, rayon, fiberglass, etc.). Its hardened steel gripper is said to hold the filling firmly and in a straight line, before and during the cut. There is no fiber to wear and no bending of the filling, as with holding blades of conventional cutters, Livermore reports. One factory-adjusted setting is said to last the lifetime of the part for correct opening and closing of the gripper and curved cutter blades in exactly the proper sequence. (Request Item No. C-4)

Anti-Static Agent

A new anti-static agent for use on nylon, acetate, Dacron, Orlon and other hydrophobic fibers has been developed by Crest Chemical Corp., Newark, N. J. The company reports that Crestex Antistat B is highly effective for the elimination of static build-up. Treated fabrics are claimed to have better appearance and hand, to resist lint and dust soiling, to avoid unpleasant electrical shocks and to eliminate the clinging and riding-up which often takes place with untreated garments.

Crestex Antistat B is an amber colored viscous liquid readily soluble in cold water, stable to storage and neutral in pH. It can be used to treat dyed fabrics with no change of shade or white fabrics with no yellowing and is compatible with nearly all types of finishes including resins, softeners, fixatives, etc. It can be used at any pH and is applied from a short bath such as a pad or quetsch or from a long bath by exhaustion, according to Crest.

This agent is applied to textiles in quantities of 0.12% on the weight of fabric in order to effect anti-static control. It is recommended for use in the spinning of continuous filaments and eliminating ballooning of yarn during rewinding or warping. (Request Item No. C-5)

Strob Revolution Counter

The Touro-Strob, a universal stroboscopic measuring instrument made by Mayer & Co.

Lenkotex Co., New York City, has announced the development and availability of the Mayer Touro-Strob, universal stroboscopic measuring instrument. The unit is a stroboscopic revolution counter, speed measuring unit and electrical tachometer produced by Mayer & Co., Neheim-Huesten, West Germany.

The Touro-Strob is being used for the measurement of speed and for the study of operation of spindles, looms, pickers, shuttles, ring travelers and other moving parts.

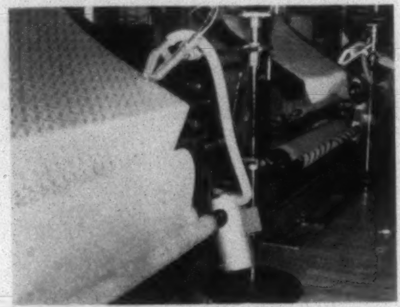
In operation, a neon discharge tube produces a sharply focused red light, which is beamed on the part which is being observed. The dial is then adjusted until the object stands still and the speed can be read directly in r.p.m. on the calibrated dial. The neon beam is bright enough to permit clear observation even in bright daylight.

The Touro-Strob is said to be a handy, package size instrument with a total weight of four pounds. It is designed to operate on 110V a.c. Power consumption is 25 to 35 watts. Capacity is from 200 to 15,000 r.p.m. in three ranges of 200 to 900, 900 to 3,600 and 3,600 to 15,000 r.p.m. The unit is said to be accurate within plus or minus ½%. The flashing range is up to 15,000 per minute. (Request Item No. C-6)

Compact Canned Pump

A new low-cost, compact, leak-proof pump for commercial and industrial use has been developed by Dynapump Division of Fostoria Corp., Huntingdon Valley, Pa. The unit, known as Dynapump Model 670 E, will handle up to 1,500 g.p.m. It will provide heads up to 20′ All wetted metal parts are stainless steel. Since rotor, shaft and impeller form a single assembly enclosed or canned in a stainless steel cylinder, there is no stuffing box or mechanical seal. Leakage is said to be thus completely eliminated. The pumped fluid itself circulates in the rotor chamber and acts as bearing lubricant and motor coolant. No external lubrication is required. Dynapump Model 670 E is suitable for pressures to 150 p.s.i. and temperatures to 220° F. It is available for operation on either 115 or 220 volts, single phase, 50 or 60 cycles. Automatic overload protection is provided. The new pump can be used for a wide variety of solvents and other "difficult" fluids. (Request Item No. C-7)

Selvage Trimmer



Tek-Matic's new selvage trimmer for cutting fabric loops and loose threads.

The Tek-Matic Sales Co., West Englewood, N. J., has introduced a new inexpensive selvage trimmer for cutting fabric loops and loose threads. Both single and double units are available, the latter designed primarily for cutting the loops on box loom goods. The trimmer is said to work efficiently on all types of yarns, including nylon and metallics, with no danger of pulled threads. The single model machine can be used for trimming loose yarns which are free from loops.

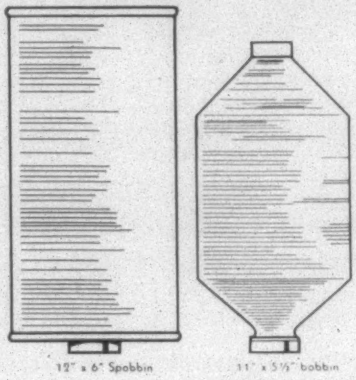
Featured are compact size, light weight and operating speeds up to 100 yards per minute to keep pace with the inspection machines. Clippings are automatically deposited in a container. Adjustments for suction and closeness of cut are said to be simple and blades and guards are interchangeable for various types of fabrics. Initial outlay is said to be low, power consumption is small and maintenance is minimal with no complicated servicing required. (Request Item No. C-8)

Feeler Stabilizer

Raymond H. Lee, Anderson, S. C., has introduced the Lee feeler stabilizer designed to maintain better control over pieces and waste made at filling change. The device is an attachment for Midget Feelers on looms. It does not replace any part of the feeler but is an addition. It is said to control premature changing of filling in the shuttle by stabilizing feeler tip or blade, thus preventing making of pieces, or waste filling. This is accomplished by controlling and preventing the movement of the feeler tip or blade either horizontally or laterally. Movement of the feeler tip or blade near the filling change in the shuttle is usually the cause of making pieces.

The attachment is said to be easily in-

How BIG Do You Want Your Roving Packages?

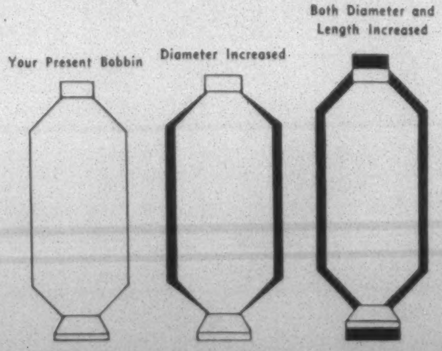


By simply widening or lengthening your flyers, Ideal materially increases package sizes. By doing *both* you get bobbins of up to 35% greater capacity. The use of Ideal Drop Pressers produces a firmer lay and adds still more ounces to bobbin weight.

Ideal Flyer Conversions to accommodate spool type Spobbins* tremendously increases package sizes . . . doubling or even trebling capacity in some cases. *This applies to any fiber or blend or to any count which you can put on present bobbins.*

PLUS IMPROVED QUALITY Ideal's new Delayed Action Clutch** prevents Spobbin runovers, tangling, and ends down at the fly frame and eliminates breakbacks, due to sloughing, at spinning. Ideal Adjustable Spindle Steps assure even lay on either bobbins or Spobbins, regardless of wear or inaccuracies in other parts.

Write today for full information on these valuable Ideal services, and for Ideal's generous flyer trade-in allowances.



*Trade Name Akron Spool & Mfg. Co.
**Pat. Pending

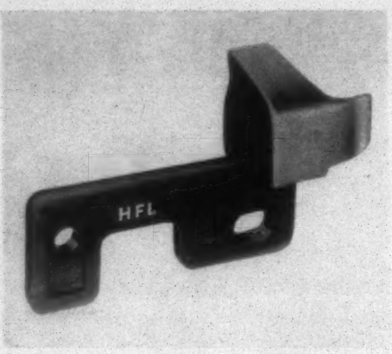
Ideal Machine Shops, Inc., Bessemer City, N. C.

Continuous Service to Textile Mills Since 1925

stalled and adjusted and to produce practically no maintenance cost. The stabilizers are designed to control all types of yarns: cotton, synthetics and blends, and can be used on all types of looms using midget feelers regardless of the tip.

(Request Item No. C-9)

Transfer Bunter And Binder Rest



The HFL Bunter and Binder Rest, designed to eliminate sidelines caused by trapped filling between box guide and binder, is now available for use on Model C-4 and C-5 C&K looms.

The H. F. Livermore Corp., Boston, Mass., has developed a new and improved all-metal transfer bunter and binder rest, No. 4690, designed for use on C & K looms, Models C-4 or C-5.

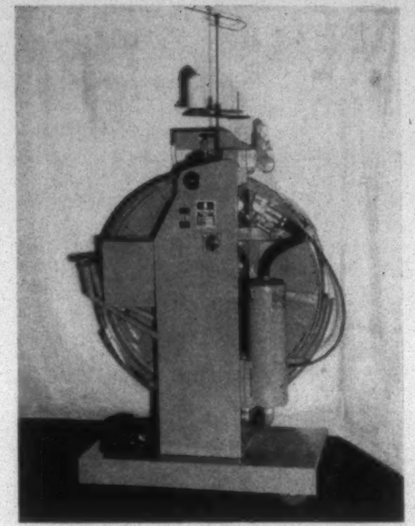
This loom part is designed to eliminate sidelines caused by breakage of the filling on the first pick, or by trapped filling between the box guide and the binder. The highly polished curved ear of this new bunter and binder rest is said to guide the shuttle into the box with an improved, smooth, positive action, and, at the same time, increase shuttle life. Replacement because of wear is no longer a problem, Livermore reports, because the conventional leather ear covering is no longer needed and has been eliminated. There are no other parts to wear. Maintenance costs and downtime due to breakage are said to be significantly reduced with this new part because it is cast of malleable iron alloy.

(Request Item No. C-10)

Greige Sewing Machine

Birch Bros., Somerville, Mass., has introduced its new Model MF automatic butt seam greige room sewing machine. The MF is said to be a high production unit designed for continuous operation. It has a feed wheel speed of 200" per minute. Average production rate is said to be better than 200 40" seams per hour.

The number of stitches in the selvages of each seam are automatically doubled, thus reinforcing the seam at its weakest point.



According to the manufacturer, the MF automatically separates each completed seam from the next, disposes of trimmed pieces of cloth, disposes of excess thread or tails between seams and strips the completed seam from the feed wheel.

To eliminate scrimps, puckers or mismatched selvages, each seam is sewn at full fabric width. The alignment for the operator has also been simplified to insure that seams are sewn straight and parallel to filling threads.

The main machine drive is all ball bearing. It is completely enclosed and runs in oil. All drive elements and automatic controls are enclosed in the main column but are easily accessible through removable covers, Birch Bros. reports. The machine uses Merrow 60D3B or 60ABB butt seam heads.

Fabricated steel construction is said to result in a relatively light unit. The machine is mounted on large ball bearing rubber-tired casters and is portable through the greige room.

(Request Item No. C-11)

New Nylon

The Du Pont Co., Wilmington, Del., has adopted the trademark Antron for a new type of nylon fiber having a tri-lobal cross section. This is the first nylon textile fiber the company has distinguished with a trademark since it introduced nylon in 1939.

Research that led to the new fiber was undertaken as part of the company's plan to develop a family of nylon fibers that offer wider styling potential to the fabric designer. Du Pont reports that the unusual aesthetic qualities resulting from the unique cross section led the company to adopt the trademark Antron. Patents covering this new nylon textile fiber have been applied for.

Evaluation work undertaken by leading mills is said to have confirmed that the particular aesthetic and processing characteristics of Antron nylon fiber result in the following advantages.

Dress fabrics are said to have a distinctive, pleasant hand, rich, three-dimensional highlights, and clear print definition. Fabrics for foundation garments are said to benefit

DURABLE
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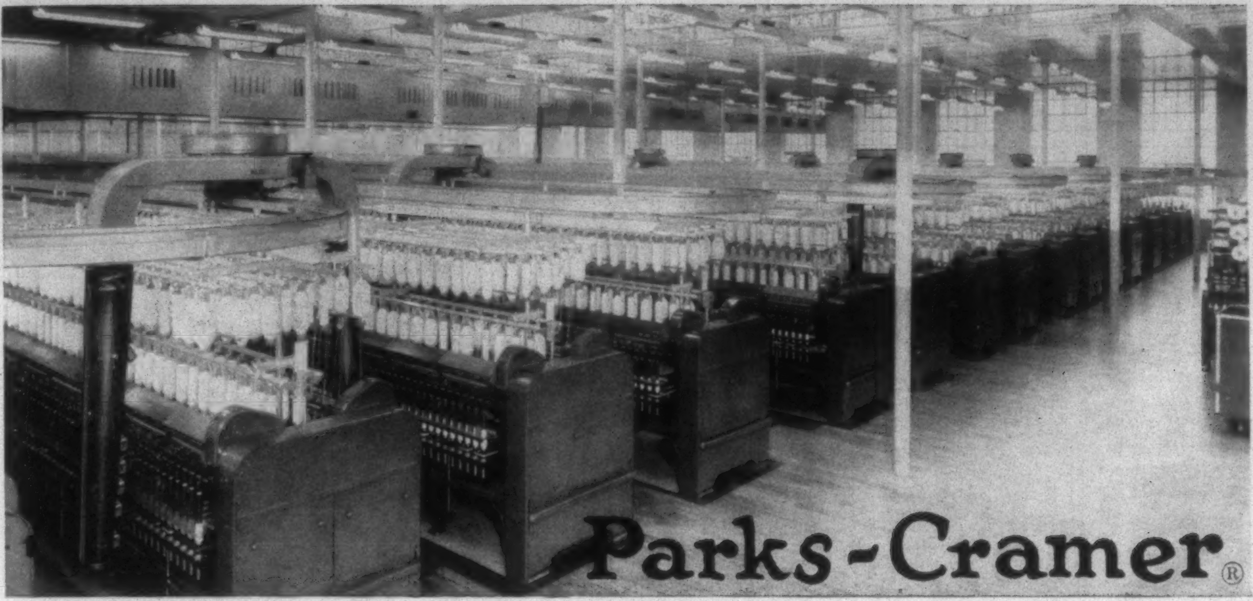
Tough, residue resistant TEFLON gives maximum performance when applied by Industrial Coatings. I. C.'s skillful spraying and controlled oven curing results in a uniform TEFLON finish that will stay on your job *longer*.

*TEFLON** as applied by I.C.

Rolls, cans, cylinders and other equipment, coated the special I. C. way, are *unconditionally guaranteed* to give lasting satisfaction under normal working conditions. I. C. also specializes in the application of non-corrosive tank linings. Try I. C. on your next order... there is a difference!

*DuPont's TFE Fluorocarbon Resin

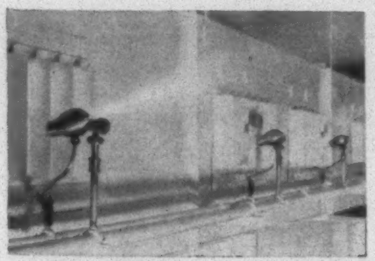
INDUSTRIAL COATINGS, INC.
PIONEER TEFLON APPLICATORS IN THE SOUTH ATLANTIC STATES
Box 1567 Greenville, S. C. TEL. CEdar 5-3573

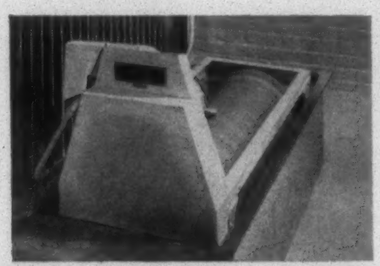


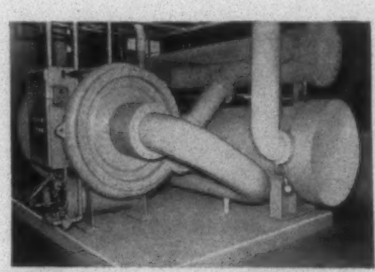
Central Station Air Conditioning

When you buy Parks-Cramer Central Station Air Conditioning you buy

- ✓ A system based on 56 years' experience in designing, manufacturing and installing air conditioning and humidification for textile mills.
- ✓ One or more central air washer units of superior performance and longevity. Here air is cooled or heated, humidified or dehumidified, washed and otherwise purified depending upon requirements. Refrigeration and electrostatic filters included when needed.
- ✓ Uniform air distribution to every department of the mill under close, reliable automatic control.


GraduVac humidifiers are used at duct outlets where conditions dictate. Fine spray and automatically varied evaporative output make GraduVac ideal.


Rotary tank screen filters water before it is pumped to spray nozzles. Performance of washer improved, maintenance greatly reduced.


Standard refrigerating equipment selected and engineered to suit each individual installation.

Certified Climate regulator for zone control of room conditions.

Rugged, simple, dependable.

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Certified Climate Systems since 1904

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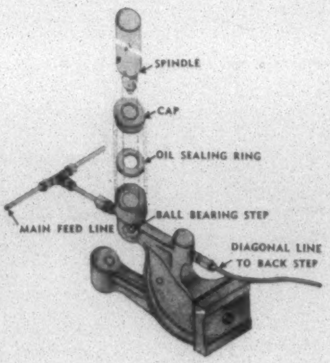
ELIMINATE TANGLED ROVING 90%

With

Pressure Lubrication, Ball-Bearing Step,

you can increase your spindle speed, over the manufacturer's recommendation, 146 r.p.m., using 50% combernoil and 50% strict low middling cotton; 1.45 x square root of hank roving.



HAMILTON & SONS

MACHINE & MANUFACTURING CO., Inc.

Hannah Picket Ave.

ROCKINGHAM, N. C.

from the fiber's influence on hand and wicking action. Women's uniform fabrics show greater opacity, or cover.

Shell and fleece fabrics for men's outer jackets have a notably dry hand and greater opacity, Du Pont reports. The company also anticipates that the new fiber will find application in similar fabrics for children's snowsuits.

In upholstery fabrics, Antron nylon fiber imparts greater covering power and higher luster. Other qualities of Antron, such as drape, dyeability and wash-and-wear properties are comparable to those of regular Du Pont nylon.

The new yarn is described as a non-round cross section multifilament. It is priced at 5 to 10 cents a pound above comparable yarns of the regular nylon.

(Request Item No. C-12)

Tape Dispenser

A gummed tape dispenser designed to deliver from 9 to 60" by electronic controls with two easy set tape lengths, each instantly interchangeable, and one random tape length for visual operation has been introduced by Diagraph-Bradley Industries, Herrin, Ill. All controls are electronic in this 10 x 16 x 11" machine.

Hardened self-sharpened tool steel shears enable this machine to cut either kraft or reinforced tape with no adjustment, operating on 110v, 60 cycle a.c., the company reports.

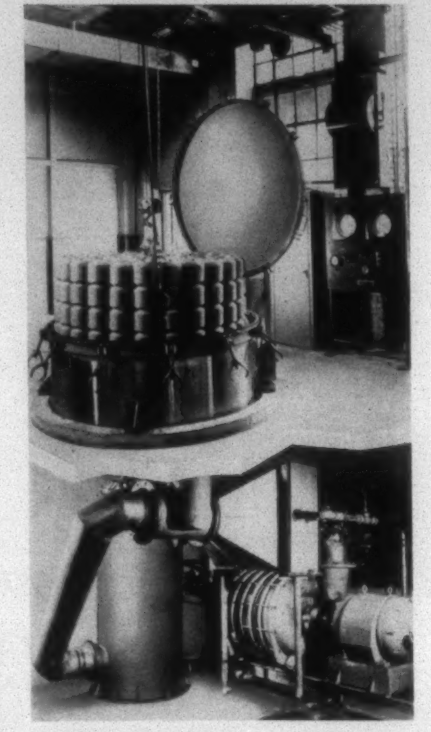
Adjustable tape width dividers to handle tape from 2½ to 3" wide at rate of 40" per second, plastic water bottle, thermostatically controlled heater, dual moistening brushes, foot switches and printing attachments are among other features.

(Request Item No. C-13)

Turbo Extractor-Dryer

Turbo Machine Co., Lansdale, Pa., has developed a new recirculating-type Extractor-Dryer for packaged yarns, said to speed up the extracting-drying operation.

The new machine is simple in design and can be installed rapidly at low cost, with only little maintenance required afterwards, according to Turbo development engineers. No compressed air is needed. There are no air-oil filters or conventional air filters.



The basement installation for Turbo's new Extractor-Dryer fits a space 11 x 11 feet square.

The machine has a silent-operating, non-overloading blower with automatic control of air supply temperature to the yarn, and an automatic temperature recorder for air exhaust from the yarn. It has a pressure gage to show resistance to flow. Air flow directional control is either manual or automatic. The machine shuts off automatically at the end of each cycle.

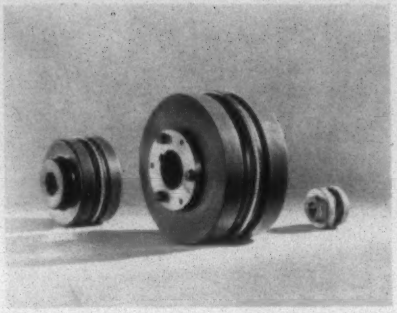
The machine features a stainless steel pressure-type kier with a precision balanced cover. Power and service supply requirements are said to be low.

(Request Item No. C-14)

Sure-Flex Couplings

A low-cost Junior line of Sure-Flex couplings is being made available by T. B. Wood's Sons Co., Chambersburg, Pa. The three sizes are: 3J, for stock bores from ⅜ through ¾"; 4J, for stock bores from ½ to 1"; and 5J, for stock bores from ⅝ to 1⅛". Peak horsepower ratings, at 1,750 r.p.m., are: 3J, 1.5 h.p.; 4J, 3.0 h.p.; and 5J, 6.0 h.p.

The lower cost is obtained by casting the flanges from zinc alloy AG4OA, which has a tensile strength of 41,000 p.s.i. The Junior line is said to retain all the desirable features of the standard Sure-Flex coupling. Design, however, has been somewhat simplified. A Junior Sure-Flex has only three components: its two cast fingers and a one-piece rubber sleeve. The molded teeth of the flexible sleeve lock into the teeth of the flanges without clamps or screws, tightening under torque to provide smooth transmission of power. There is no metal-



Wood's line of Sure-Flex couplings includes *(left to right)* standard, bushed and Junior sizes.

to-metal contact; hence no wear on the teeth of the flanges, the company reports.

Wood's has also added to the regular Sure-Flex line a new No. 14 coupling, which is rated at 500 peak horsepower at 1,750 r.p.m. It will accommodate shafts ranging from 1″ through $3\frac{15}{16}$″.

Larger Sure-Flex couplings, Nos. 11, 12 and 14, are now fitted with demountable Sure-Grip bushings. By shifting these interchangeable, QD-type tapered bushings, a coupling may be used on different-sized shafts throughout its size range. The company points out that this reduces the number of couplings needed to be stocked.

(Request Item No. C-15)

Pigment White

Eccoblanc W-45-B, a new pigment white for roller printing or discharge printing, is termed the "whitest white obtainable" by its makers, Eastern Color & Chemical Co., Providence, R. I. The company reports that the new product has proven to be an excellent permanent white pigment for overprinting on dyed background goods since it contains non-curing binders, finely dispersed titanium dioxide, and permanent non-yellowing whitener.

When used on discharge printing, Eccoblanc W-45-B reportedly insures permanently white, non-yellowing prints. Sharp prints are assured because the thickening agents and viscosity are such that they will not thin or diminish in any way the viscosity of the print paste.

In appearance, the new Eccoblanc W-45-B is a smooth, white, semi-firm paste. An added advantage is stability to indefinite storage.

Generally, the makers note that Eccoblanc W-45-B is completely compatible with most printing systems, including some w/o systems.

(Request Item No. C-16)

Reactive Dyestuff

With the Drimarene-Z brands, Sandoz Inc., New York City, introduces the first group of a new range of reactive dyestuffs. They are concentrated products which have been specially developed for printing cotton and viscose filament and staple fiber. Along with the inherent properties of reactive dyestuffs, they are said to show certain distinctive characteristics which are of great value in practical application.

The excellent stability of Drimarene-Z

Does

YOUR Warper

have . . .

- **DENSITY CONTROL?**
- **UNIFORM SPEED CONTROL?**

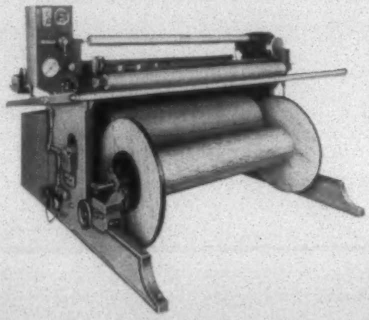
ALLEN MODEL "G", the modern warper with PATENTED HYDRAULIC CONTROL, gives you:

Uniform Density of Warp throughout entire build-up.

ALLEN PATENTED HYDRAULIC CONTROL maintains uniform pressure at all times between the beam surface and the pressor roll which drives the beam. The nip between this roll and beam is always at same distance and angle, so yarn tension is kept uniform. HARD-SHELL, SOFT-CENTER WARPS ARE POSITIVELY ELIMINATED.

Controlled Uniform Yarn Speed, variable at will.

ALLEN PATENTED HYDRAULIC CONTROL maintains uniform pressure between beam surface and driving roll, assures positively uniform yarn speed—free from the abrupt jumps in speed experienced with now obsolete methods of constantly adjusting the drive speed in an endeavor to compensate for warp build-up. In addition, ALLEN VARIABLE SPEED DRIVE enables the oprator to SELECT EXACTLY THE RIGHT SPEED FOR THE YARN BEING RUN. This means your ALLEN warper is always adjusted for MAXIMUM production consistent with QUALITY.



Don't put up with old-style warping!

Put this modern warper concept to work along with your other modern equipment. Time-proved, patented,—no other warper has these features.

REQUEST "MODEL G BROCHURE."

Allen Company, Inc., New Bedford, Mass., U.S.A.

ALLEN MODEL "G"

World's Most Advanced High Speed Warper

printing pastes means that freshly prepared or partly used colors can be stored for a considerable time without deterioration; even after a period of weeks no decomposition effects and no precipitation occur, Sandoz reports.

The unfixed portion of dyestuff can be readily washed off the fiber, because of its low substantivity. The Drimarenes possess little or no affinity for cellulosic fibers. Another advantage of this property, Sandoz says, is that it prevents the take-up of loose dyestuff from the washing baths, and the consequent danger of staining on the unprinted parts of the design.

Good stability to steam and heat is another important feature cited for the new Drimarene-Z dyestuffs. They are fixed by short steaming or treatment in dry heat.

A simple printing which is applicable with all the members of the Drimarene range allows individual brands to be combined in any desired proportions.

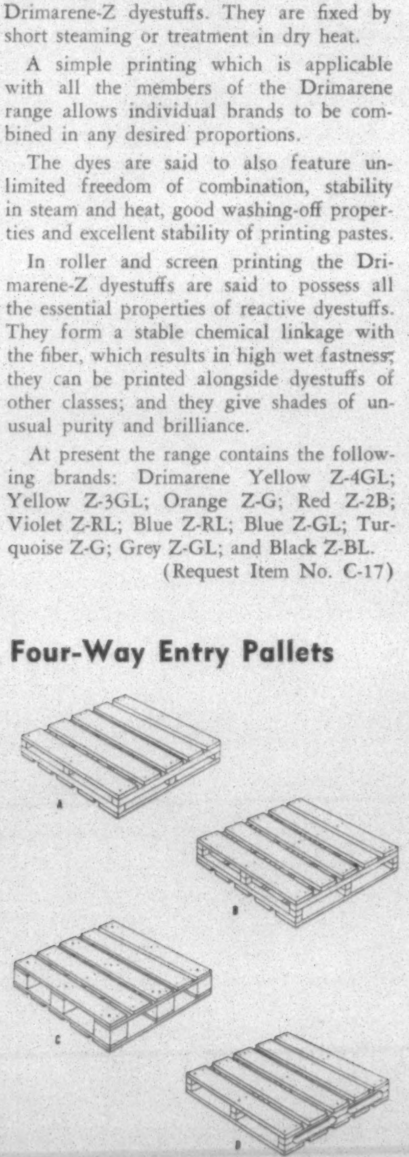
The dyes are said to also feature unlimited freedom of combination, stability in steam and heat, good washing-off properties and excellent stability of printing pastes.

In roller and screen printing the Drimarene-Z dyestuffs are said to possess all the essential properties of reactive dyestuffs. They form a stable chemical linkage with the fiber, which results in high wet fastness; they can be printed alongside dyestuffs of other classes; and they give shades of unusual purity and brilliance.

At present the range contains the following brands: Drimarene Yellow Z-4GL; Yellow Z-3GL; Orange Z-G; Red Z-2B; Violet Z-RL; Blue Z-RL; Blue Z-GL; Turquoise Z-G; Grey Z-GL; and Black Z-BL.

(Request Item No. C-17)

Four-Way Entry Pallets



There are four basic designs of the new Signode pallets plus various modifications.

The Signode Steel Strapping Co., Chicago, Ill., has purchased the Cruickshank patents No. 2,371,878 and No. 2,436,554 covering 4-way entry pallets. The new pallets are usually made of wood, have combinations of fastenings such as nails, screws and bolts. They are all of the 4-way entry type and are of heavy construction for multi-use warehouse operations. There are four basic designs of the new Signode pallets, A, B, C and D. Various modifications of these constructions are available.

All Signode wood pallet licensees are presently licensed to sell the standard 4-way entry, block type or notched stringer type pallet under Patent No. 2,369,944.

The present licenses will be extended to include rights under the Cruickshank patents. (Request Item No. C-18)

Narrow Aisle Truck

The Raymond Corp., Greene, N. Y., is now offering its heavy duty narrow aisle electric truck with a single drive wheel and offset caster. Development of the single wheel drive enables the company to sell the new model at a lower price while retaining most of the features of the original unit. Both trucks are designed for applications requiring fast lifting speeds and continuous operating handling loads up to 4,000 lbs.

The hydraulic lift is driven by an 8 h.p. motor operating from the large 24-volt battery which powers the truck. Lifting speeds have been substantially increased. The heavy duty lift motor enables the truck to be used continuously over long periods to raise capacity two ton loads as high as 20′ without overheating.

A separate motor furnishes power for the hydraulic circuit controlling the Reach Fork mechanism, and special attachments such as clamps, tilting forks, die handling devices or other accessories.

The single drive unit is powered by a pancake type motor directly coupled to an offset drive wheel by a planetary gear arrangement. A patented spring suspended caster on the opposite side of the power unit, plus the two large rubber tired wheels in the base forks, are designed to provide proper four-point stability for the high lifts. (Request tIem No. C-19)

For the Mill Bookshelf

Ultra-V Drives

T. B. Wood's Sons Co., Chambersburg, Pa., has published Bulletin No. 9102 describing its Ultra-V Drives. The publication contains 36 pages of technical information on a drive which is said to reduce over-all drive dimensions by as much as 50%, save up to 25% in weight and 30% in cost over conventional V-belt drives. Included are drive-selection tables for stock and nonstock sheaves, horsepower tables, nomograms for service-level comparisons of drive costs, sheave and belt specifications, bushing and keyseat specifications, installation instructions for Sure-Grip sheaves, information on how to check the tension of an Ultra-V drive, etc.

(Request Item No. C-20)

High Pressure Pumps

A high pressure line of sealless leakproof pumps is described in a new 4-page, 2-color Chempump Bulletin 1070-1 available from Chempump Division, Fostoria Corp., Huntingdon Valley, Pa.

(Request Item No. C-21)

Dyeing Assistant

A new bulletin describing the properties and applications of Solvofen HM, a dyeing assistant and solvent, has been released by Antara Chemicals, a sales division of General Aniline & Film Corp., New York City. Solvofen HM is said to be especially useful in high speed, continuous dyeing operations.

The chemical is a substituted pyrrolidone with unique solvent and dispersing properties, making it particularly suitable for promoting better dye penetration of hard twisted yarns, bulky fabrics and tightly woven cloth. It also aids leveling on both fibers and piece goods. In addition, it is used to remove colorants and other residues from padder rolls and tenter frames.

Solvofen HM is said to be chemically stable and completely miscible with water and most organic solvents. It is non-foaming, non-volatile, and non-corrosive.

The brochure lists specific uses in textile applications, both with natural and synthetic fibers, lists potential uses in pasting and dispersing of certain classes of dyestuffs, and describes cleaning procedures involving removal of dyestuffs and pigments from rubber and metal equipment as well as woolen felts. Product data is also given.

(Request Item No. C-22)

Surfactant Catalog

A new 24-page catalog of surface active agents has been published by the Onyx Oil & Chemical Co., Jersey City, N. J.

Each product is described by trade name, active ingredient, per cent activity, physical state, general use, specific applications and properties.

The products are divided into three general classes: anionic, cationic and non-ionic. There is a 2-page section explaining the chemistry of each of these groups.

(Request Item No. C-23)

Industrial Truck

A new 4-page folder illustrating and describing its 5,000-lb.-capacity industrial truck, the F-50T5, has been published by The Elwell-Parker Electric Co., Cleveland, Ohio. The literature highlights Acro-Smooth, a carbon-pile speed control, designed to give the operator smoother, more precise control. Diagrams, photographs and a detatiled analysis of each important working part of the truck are provided.

(Request Item No. C-24)

costs come down

with the CARTER

"Supreme" traveler

yarn quality goes up

Yes . . . you pay more for Carter's "Supreme" plated traveler, but you get profit-performance that justifies the name.

Problems of rust—nep control—excessive traveler changes and down time . . . are met and solved with the cost-cutting "Supreme" traveler. Pioneered by our own metallurgical laboratories . . . incorporating all of the traditional CARTER craftsmanship and quality—the "Supreme" traveler makes a material contribution to the production of finer, stronger yarn—made and sold . . . *profitably!*

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1926 "IF IT'S PAPER" 1960

Serving The Textile Industry

Dayton Rubber Co. Reports Record Sales

Sales of The Dayton Rubber Co. for the year ended October 31, 1959, reached a new record of $101,838,313, according to C. M. Christie, president. This exceeds 1958 sales of $85,509,634 by 19%. The 1958 sales figure was a previous record for the company.

Net profits for fiscal 1959 totaled $2,414,226 as compared with $1,324,434 in 1958. The earnings for 1959 do not include $331,000 of the undistributed profits of the Copolymer Rubber & Chemical Corp. Dayton owns a one-seventh interest in Copolymer. In 1958 Dayton's share came to $246,000.

"In spite of some adverse effects of a short strike at our Dayton plant early in the year and some restrictions in shipments late in the year due to the steel strike, our sales volume in 1959 reached an all-time high, and our earnings improved to be the second highest in the company's history," Christie said.

Saco-Lowell Reports Improved Operations

In his report to stockholders on results of his first full year as president of Saco-Lowell Shops, Thomas J. Ault pointed to improved operations in 1959 and expectation of resumption of operating profits in 1960.

The last year Saco-Lowell showed a profit was in 1956, and the 1958 losses were $5,142,730. In 1959 the losses were reduced to $1,990,437, with the second half, after reflecting favorable non-operating adjustments of approximately $600,000, showing a small profit. Sales in 1959 were $27,455,278 compared to $27,253,638 in 1958.

As to prospects for 1960, Ault said: "The outlook for the textile industry for 1960 is more favorable than it has been in some years, and it is reasonable to expect that our volume of business should reflect this trend and permit resumption of operating profits."

American Enka Launches Consumer Ad Campaign

American Enka Corp., New York City, has launched what it calls a giant consumer Spring ad campaign featuring garments made of Enka nylon. Seventeen pages of consumer advertising (11 in full-color) will be used in leading mass and fashion publications.

Junior cocktail dresses, bridals, children's party dresses and textured nylon knitwear have been selected as the major end-product categories for this promotion. This campaign follows up Enka's holiday consumer ad campaign for nylon apparel and again will emphasize the superior hand, dye-affinity and absorbency of fabrics made with Enka nylon.

Direct mail, trade advertising, local newspaper publicity, resource lists, in-store displays and extensive sales training will support the consumer ads appearing in *Vogue, Holiday, The New Yorker, American Girl, Parents, The New York Times Magazine, Vogue Pattern, McCalls Pattern Book* and *Bride's Magazine.*

Sole Chemical Corp. Has New Headquarters

Sole Chemical Corp., Chicago, Ill., producer of surface active chemicals, is now occupying new and larger headquarters at 7740 South Chicago Avenue, Chicago, Ill.

Solomon Epstein, president, explained that this move will greatly expand the company's manufacturing facilities, as well as improve the co-ordinating effort of its laboratories, warehousing and offices for a more efficient customer service. The new location, because it is strategically near the principal East-West-South intersection of the arterial highways into and out of the Chicago area, and because it is on the approach to the Calumet harbor, will improve and accelerate the rapidly increasing flow of its product shipments.

Loom Products Co. Formed In Greenville, S. C.

A new company, Loom Products Co., has been formed in Greenville, S. C., by Miss Louise Kellett and John Pruitt. The company will manufacture textile hardwood accessories, specializing in weave room supplies. Miss Kellett is executive manager, Pruitt is superintendent of manufacturing. Ellison C. Mitchell and the Springfield Co. are agents for the company's products.

Dow's James River Division Will Produce Nylon 6

Plans for the construction of a plant to manufacture nylon 6 at The Dow Chemical Co.'s James River Division, Williamsburg, Va., have been announced by Arthur E. Young, manager of Dow's textile fibers department.

The addition of nylon 6 to the product line being marketed by Dow's textile fibers department brings the roster of Dow fiber and filament products to four. The new multi-million dollar nylon plant will have an initial capacity of 12 million pounds per year of filament yarn primarily for use in tire manufacturing. Construction will start in March and completion of the plant is scheduled for late in 1961.

It is expected that the new facilities, which will occupy part of the company's 600 acres at James River, will boost the division's employment by approximately 250. Zefran acrylic staple fiber operations, started at James River in mid-1958, currently employ 430.

The basic consideration in the company's decision to manufacture nylon 6, Young said, was to take advantage of a market potential now developing for tire yarn and other coarse filament yarns. The addition of nylon to Dow's interests will broaden and more firmly establish the company's position in the textile field. He added that it is anticipated the company's textile fibers department program, headquartered at James River, will be expanded to handle marketing of nylon 6 in addition to Zefran.

Roberts Co. Reports Satisfactory Profits

Highest sales in company history and a return to satisfactory profits were announced by the Roberts Co., Sanford, N. C., for its fiscal year ended November 28, 1959.

For the last six months of the fiscal year, Roberts recorded sales of $3,272,236, which exceeded the total for 1958. Profits after taxes were $220,654. Earnings were all on manufacturing operations and no non-recurring adjustments or credits were involved.

Last half-year results recovered a loss incurred in the first six months. Total sales for 1959 were $5,269,828, and net after tax profit $60,529. This compared to sales of $3,166,339 and an after-tax loss of $319,529 in 1958.

"Our directors were gratified at the 1959 turnabout from 1958," said Robert E. Pomeranz, president. "Ever since the company started, each year was a profitable one except for 1958."

At the end of 1959, Roberts had the highest backlog in its history. It stood at $4,100,000 despite heavy shipments in the prior six months. Contracts with mills were spread among the three branches of the company's business: Arrow spinning frames for cottons and synthetics; Arrow spinning frames and allied machines for worsteds and blends; and modernized frames and changeover modernizations of frames on the mill floors.

In the ten years just ended, Roberts reports that it has had a tremendous and increasing impact on the textile industry. Over 3½ million spindles were replaced, modernized or newly-installed with Roberts High Draft spinning—about 20% of the operating spindles in this country.

Since mid-1956, when Roberts began making complete new machines, the company has received contracts for 1,351 complete spinning frames totaling 387,028 spindles. Added to this were contracts received since the beginning of 1950 totaling 3,165,728 spindles of modernization changeovers.

Of the 1,351 complete machine contracts, more than 630 with almost 200,000 spindles have been for the all ball bearing Arrow M-1 cotton system frame. These have been installed to produce yarn for such diverse end-products as Egyptian cotton-Dacron shirtings, dress goods, twills, quills, print cloths, combed broadcloths, percale and muslin sheetings, gabardines, poplins, osnaburgs, corduroys, draperies and knitted products.

Contracts for the long fiber worsted system spinning frames, put on the market a little more than a year ago, already total 161 machines amounting to 37,964 spindles. Yarns from these frames are for weaving purposes, principally the new suitings, and for knitting yarns either 100% worsted, 100% synthetic and/or blends of fibers.

Armstrong Cork Co. Makes Territory Change

The industrial division of the Armstrong Cork Co., Lancaster, Pa., has announced that the counties in Virginia previously covered by the Greenville, S. C., office have been made the responsibility of the Philadelphia, Pa., office.

Officers Purchase Control Of U. S. Textile Machine

Controlling interest in the 31-year-old U. S. Textile Machine Co., Scranton, Pa., has been purchased by officers of the firm, according to an announcement by A. W. Thomas Jr., president.

All of the officers have been active in the company's management and operations over a period of many years, and recently acquired the majority stock from the estate of Herbert Gleitz, former president of the organization.

In addition to Thomas, officers of Textile Machine Co. include: Donald W. Scheuer, secretary-treasurer; Pacific J. Thomas, vice-president and director of engineering; Jerome D. Gleitz, vice-president and director of manufacturing; and Chester L. Loveland, vice-president, fiber glass division.

U. S. Textile Machine was founded in 1929 in Scranton by the late A. W. Thomas Sr., and Pacific J. Thomas.

Hurley & Harrison To Sell Benjamin Booth Products

The firm of Hurley & Harrison, Greenville, S. C., has been appointed by the Benjamin Booth Co. of Philadelphia, Pa., to handle its entire line of card clothing in the three-state area of North Carolina, South Carolina and Virginia.

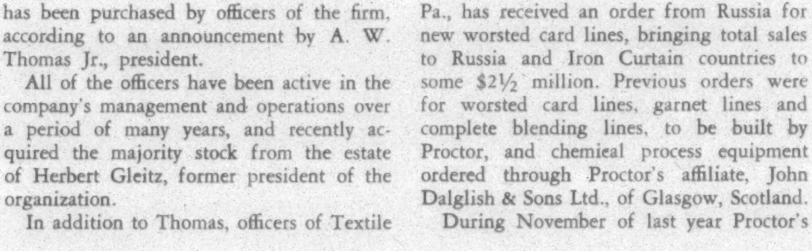
Booth manufactures, in addition to a complete line of card clothing, condenser tags, spinning frame bands and lickerin clothing. It is one of the firms pioneering in the production of the granular card developed by the Southern Regional Research Laboratory. A complete granular top carding system will be offered by Booth through Hurley & Harrison.

Proctor & Schwartz Inc. Receives Order From Russia

Proctor & Schwartz Inc., Philadelphia, Pa., has received an order from Russia for new worsted card lines, bringing total sales to Russia and Iron Curtain countries to some $2½ million. Previous orders were for worsted card lines, garnet lines and complete blending lines, to be built by Proctor, and chemieal process equipment ordered through Proctor's affiliate, John Dalglish & Sons Ltd., of Glasgow, Scotland.

During November of last year Proctor's export manager, Al Cadet, and John Dalglish, managing director of John Dalglish & Sons Ltd., of Glasgow, spent over a month in Moscow in the consummation of the respective orders.

In addition to this equipment ordered by Russia, Proctor has also received orders from Poland for a complete line of equipment for producing nonwoven fabrics, including preparatory, web-forming, impregnating, drying and curing ovens, plus an order for a complete blending line for carpet fibers.



Batson, Beaudrot, Runge

Principals involved in the sales agreement between Southeastern and Batson include H. E. Runge, chief executive officer of Southeastern; C. L. Beaudrot, works manager for Southeastern; and H. Elliott Batson, president of Louis P. Batson Co.

Althouse Chemical Co. Joins Textile Research Institute

Althouse Chemical Co. of Reading, Pa., has joined the Textile Research Institute, Princeton, N. J., as an active member. The program at Princeton is for the advancement of the textile and allied industries in three categories: to conduct long range basic research; to train textile scientists at the graduate level; and to disseminate research information.

Becco Chemical Building New Distribution Center

Construction has begun in Lyndhurst, N. J., on a new distributing center for the Becco Chemical Division of Food Machinery & Chemical Corp., Buffalo, N. Y. The new distributing center, which is expected to be completed by May 1, will replace Becco's present center in Jersey City, which was established in 1929. It will provide larger and more efficient storage and distribution facilities for the company's products. It will also be more conveniently situated with respect to rail and road transportation facilities than the Jersey City center.

Becco maintains similar distributing centers in Framington, Mass., and Charlotte, N. C. Matthew A. Noonan, Becco's district manager in New York City, will direct the distributing operations of the new center. Anthony Wieand, distribution supervisor at Becco's present Jersey City center, will continue to be in charge of the new Lyndhurst center, which will employ about five men.

Louis P. Batson To Sell For Southeastern Loom

Southeastern Loom & Machine Works, Greenwood, S. C., has concluded an agreement whereby the Louis P. Batson Co. of Greenville, S. C., will act as selling agent for Southeastern in the sale of textile parts.

Batson will not act as selling agent for the new Maxbo loom or for any parts or assemblies for this loom. The selling agent for the Maxbo loom is Edda International Corp. of New York.

The Batson Co. operates branch offices in LaGrange and Decatur, Ga.; Greensboro, N. C.; and Providence, R. I.

C. L. Beaudrot Jr., formerly with Saco-Lowell in Sanford, N. C., has been named works manager for Southeastern and is in charge of all manufacturing operations.

Southeastern is equipped with complete foundry facilities and is engaged in the manufacture of looms, loom parts, card coilers and drawing frame changeovers, spinning frame pulley spindle drives, individual card drives, centrifugal and gear size pumps, hydraulic presses and other special machinery for the textile industry.

American Viscose Corp. Announces New Fiber

The American Viscose Corp., Philadelphia, Pa., has announced that the trademark Avril will identify its new inherently stable cellulosic fiber. Known as Fiber 40 in its early development, Avril will be in commercial production by mid-Summer.

The name Avril will be confined to fabrics made with this fiber, either 100% or in blends which meet American Viscose standards of quality control.

Chemstrand Corp. Reports 31% Increase In Profits

The Chemstrand Corp., New York City, has reported a 31% increase in consolidated net sales for 1959. In the last fiscal year earnings were $24,077,884 as compared with $18,354,723 in 1958. Sales showed a 14% increase in 1959 with a total of $197,320,824 as compared with $172,968,381 in 1958. Operating costs increased 8% from $132,004,834 to $143,214,213.

Non-consolidated figures showed that Chemstrand Corp. alone had a profit of $26,062,462 on sales of $194,522,809. This compares with a profit of $19,190,793 on sales of $170,630,520 in the previous fiscal year.

During 1959 the company announced plans for a new nylon plant at Greenwood, S. C., a nylon development center at Pensacola, Fla., and a new research center in the Raleigh-Durham-Chapel Hill area of North Carolina. The Pensacola development center was fully occupied by the end of 1959. The other facilities are expected to begin making their contributions by the end of 1960.

In the latter half of 1959 the company successfully put into production acrylic fiber facilities in the United Kingdom, Italy and Japan.

Fletcher Works Acquires Turner Mfg. Co.

Fletcher Works of Philadelphia, Pa., has announced its purchase of Turner Mfg. Co., Statesville, N. C., manufacturers of farm implements and valves. Edward T. Taws, president of Fletcher Works, said the new company will operate as the Turner Division of Fletcher Industries Inc.

The purchase included manufacturing, assembly and warehouse space of approximately 40,000 square feet, all equipment, and more than 17 acres of property. The plant is located four miles east of Statesville, in a rapidly developing area.

Production will be integrated between Fletcher Works of Philadelphia; Fletcher Southern at Southern Pines; and the new division in Statesville.

Present Turner equipment will be supplemented by new and modern specialized equipment for the manufacture of narrow fabric looms and yarn twisting equpiment. The Turner products and services will be continued where at all advisable, Fletcher reports.

Employment at the new plant will be increased to approximately 100 within the next 11 months. Edwin Egee will be division manager of the new operation and Gordon Hedrick will be plant manager.

Arnold, Hoffman Displaying In Patent Office Exhibit

Arnold, Hoffman & Co., Providence, R. I., manufacturer of organic chemicals, was selected by the U. S. Department of Commerce to participate in the Chemicals and Synthetics Exhibit sponsored by the Patent Office in Washington, D. C. The exhibit began February 15 and will continue through March 11. It is limited to 20 leading chemical manufacturers.

The exhibit is being held in the lobby of the Department of Commerce and is open to the public. According to the Commissioner of Patents, the purpose of the exhibit is "to make the beneficial aspect of our free enterprise system better understood."

Hoffman is featuring representative products from its extensive line of dyes and chemical auxiliaries and is showing how these products benefit the consumer. A variety of fabrics illustrates how modern dyes and finishes such as those that the company produces contribute to the beauty and durability of modern textiles.

To emphasize the wide range of uses for dyes and finishes, the display shows models dressed in ensembles of both all-natural fabrics and all-synthetic fabrics. The benefits afforded by the U. S. Patent Office in the development of the company's products will be the underlying theme of the display.

Increased Profits Shown By Crompton & Knowles

Crompton & Knowles Corp., Worcester, Mass., has reported net profit of $1,487,000 for 1959 as compared with $811,344 in 1958. Sales figures are not disclosed. Frederic W. Howe Jr., president, said that "present indications point to further marked improvement in volume and earnings for 1960."

The company declared a dividend of 40 cents on the common stock. A like amount, plus an extra of 25 cents, was paid by the company last December.

Texize Chemicals Inc. Announces Reorganization

Texize Chemicals Inc., Greenville, S. C., has been reorganized under laws of the state of Delaware, following approval of the change by stockholders of the South Carolina corporation. Directors of the new corporation are W. J. Greer, E. H. Kittredge Jr., W. K. Greer, E. E. Stone III, W. N. Kline Jr., James L. Love and W. M. Greer.

The reorganized company's officers are W. J. Greer, president and treasurer; E. H. Kittredge, executive vice-president; W. N. Kline Jr., H. H. McGee and John B. League, vice-presidents; and James L. Love, secretary. All hold the same offices in the corporation except League, who formerly was president of Industrial Products Inc. of Greenville, a company purchased by Texize last year.

The directors also declared a 100% stock dividend to holders of record as of February 1, 1960, granting an additional share for each share now held.

The company says that the reorganization will provide a more favorable climate for its future growth. The existing South Carolina corporation will be liquidated and dissolved but the change will not affect the physical assets of the company or its personnel.

The company showed the largest growth in dollar sales in its history in the last fiscal year—ended October 31, 1959. Sales for the period amounted to $16,436,486 as compared to $10,245,204 for the preceding year.

Proctor & Schwartz To Build Kuljian Rayon Machines

Three internationally known corporations, with engineering and manufacturing facilities in the U. S. and Europe, have formed a new world-wide textile service organization.

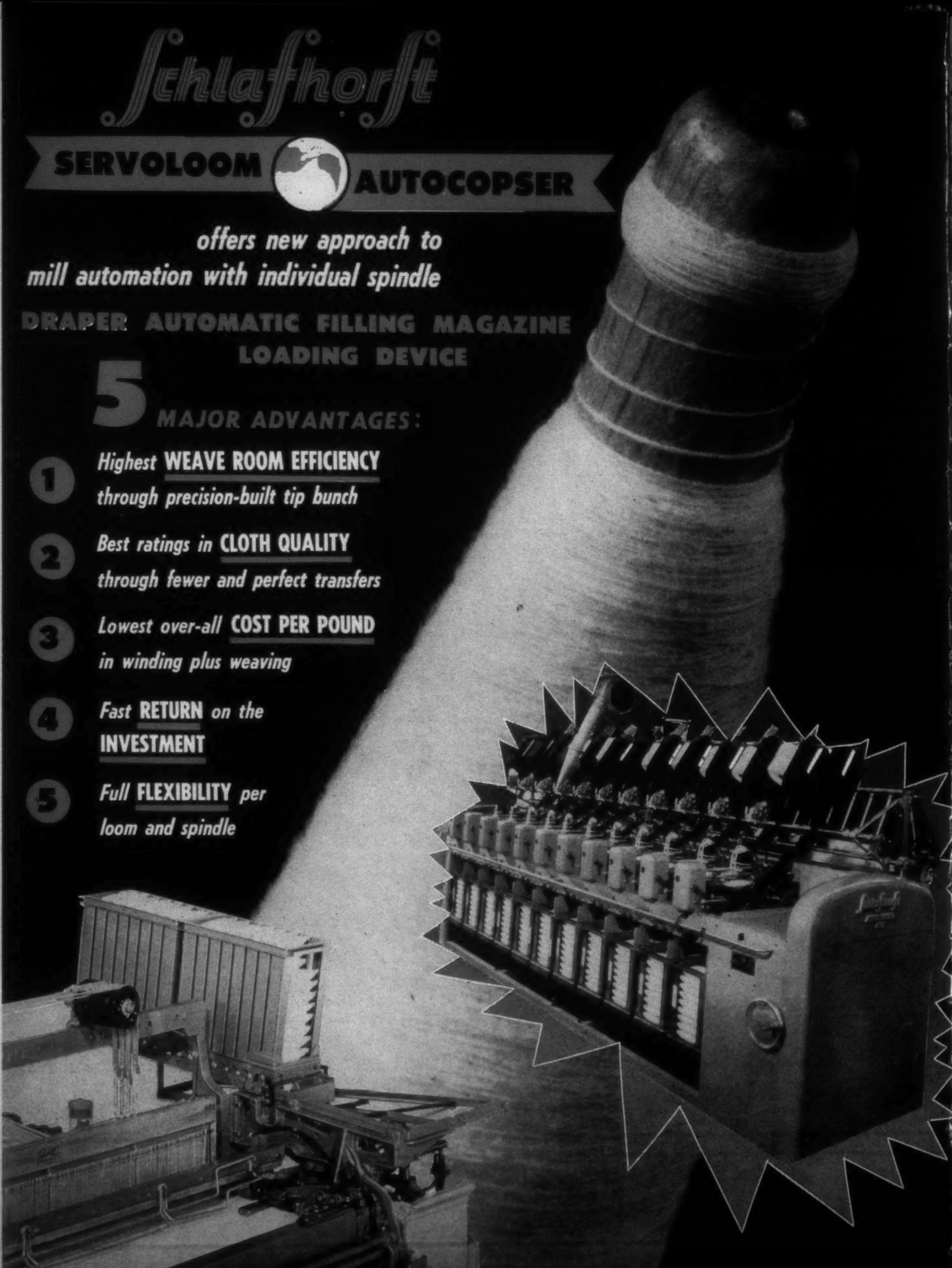
The new firm is a joint undertaking of The Kuljian Corp., Philadelphia, Pa., Proctor & Schwartz Inc., Philadelphia, and Sociedad Nacional Industrias Applicaciones Celulosa Espanola (SNIACE) of Madrid, Spain, one of Europe's largest rayon yarn manufacturers.

The new corporation, to be known as Fiber Process Associates (FIPROA), will engage in marketing the Kuljian continuous rayon spinning and processing machine. In addition, FIPROA will design and construct new or modernized rayon plants fully equipped with Kuljian machines, as well as provide initial operating services for such installations.

The Kuljian machine is said to produce two continuous filament yarns on each spinning unit, from the viscose solution to the completely finished product, in less than three minutes. Conventional pot or bobbin spinning processes require from four to five days. The unit is said to be capable of producing yarns finer than 100 denier. The same machine with a few adjustments can produce heavy denier and high tenacity yarns for tires and other industrial uses.

Yarn processed by the Kuljian process is said to be more uniform, of superior quality, better for dyeing, and untouched by human hands during processing. All likelihood of damage to the yarn caused by the usual transfer from operation to operation is said to be eliminated.

The exclusive, world-wide licenses to build Kuljian machines and to apply Kuljian patents to all types of fiber processing have been obtained by Proctor & Schwartz. This Philadelphia firm has manufacturing affiliates in Great Britain and West Germany for the production of textile machinery and industrial processing equipment.



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By HENRY KEARNS, Assistant Secretary of Commerce for International Affairs

The following is virtually the full text of the Assistant Secretary's much heralded address before the Charlotte Textile Club on February 22.

FOREIGN competition long has been of concern to textile producers the world over. A look at our history books will find that England worked mightily to keep the upstart colonists in America from establishing a textile industry which would "destroy" England's export trade with the New World. What is past is prologue, and you see much the same attitude towards some of the newly developing countries today.

The English, you know, were unsuccessful and an industry which had its beginning with a score of small cotton plants in New England and the Middle Atlantic Colonies in the late 1600's, and gained in momentum as cotton mills swung into full production beginning in 1789, expanded fairly steadily throughout its history into the 1920's—and despite the cries of alarm, the British textile industry prospered for those 200 years.

Our *exports* of cotton cloth during this period of expansion were of great importance to the textile industry and in every year since 1879 the volume of cotton cloth exports has exceeded by far the volume of corresponding imports.

In 1879, for example, the industry exported 129 million square yards of cotton cloth, about half the total amount exported last year. Exports rose generally to periodic peaks of 205 million square yards in 1887, 505 million in 1902, 711 million in 1906, and 819 million in 1920.

Imports Also Up

At the same time, the volume of cotton cloth imports also was rising—12 million square yards in 1879, and periodic peaks of 32 million in 1886, 49 million in 1893, 65 million in 1900, 84 million in 1907, and 104 million in 1920. Coincidental with this general rise in imports was a general rise in the total health of the domestic industry.

In 1919, the total value of products produced by the cotton textile industry reached a pre-World War II high of $2.1 billion. The number of active spindles in place reached an all-time high in 1921. The number of mills in operation reached an all-time high in 1922. Imports reached 219 million square yards in 1923, a year after Congress passed the Fordney-McCumber Act raising the tariff rates; still in 1923, the industry had a net income after taxes of $90.7 million.

After 1923, the volume of imports began a sharp decline, from the 219 million square yards of that year to the 61 million square yards of 1929. While running at a deficit during two of the intervening years, the industry's net income after taxes in 1929 had fallen to $16.2 million.

Our nation was hit by depression, and the next year, 1930, Congress passed the Smoot-Hawley Act. Imports were cut in half, and the cotton textile industry showed a net loss of $92.6 million, the worst year in its history.

I cite these figures and events only to show that an unbiased observer will find it difficult to note much correlation between the health of the U. S. textile industry, the degree of import competition, and the degree of tariff protection.

Probably the most salient features of the economic growth of the industry were the migration of the industry to the South and the peak production required by the two world wars and the war in Korea.

While the total cotton system spindle population of the nation was declining generally after its all-time high in the 20's, the spindle population in the South was rising. The proportion of spindles in place located in the South increased from 47% in 1925 to 76% in 1945, and the location of cotton looms showed a similar shift from 56% to 79%. Today, 91% of the spindles in place are located in the cotton growing states.

Probably the most salient features of the economic changes in the textile industry have been:

(1) The changing percentage of disposable income being spent on the industry's products.

(2) The apparent inability of the industry, due to overcapacity and three-shift operations, to gear output to the volume the market will absorb at a profitable price.

(3) The loss of markets, particularly in the industrial field, to non-textile products such as paper and plastics.

(4) The mounting inter-fiber competition within the industry.

In a nutshell, the share of consumer spending for apparel, as one example, has dropped from 9.4% in 1948 to less than 7% today; the industry has been running at less than full capacity since the end of the Korean War; from 1950 to 1957 alone, industrial end-users cut their consumption of cotton textiles by 29%; and, according to

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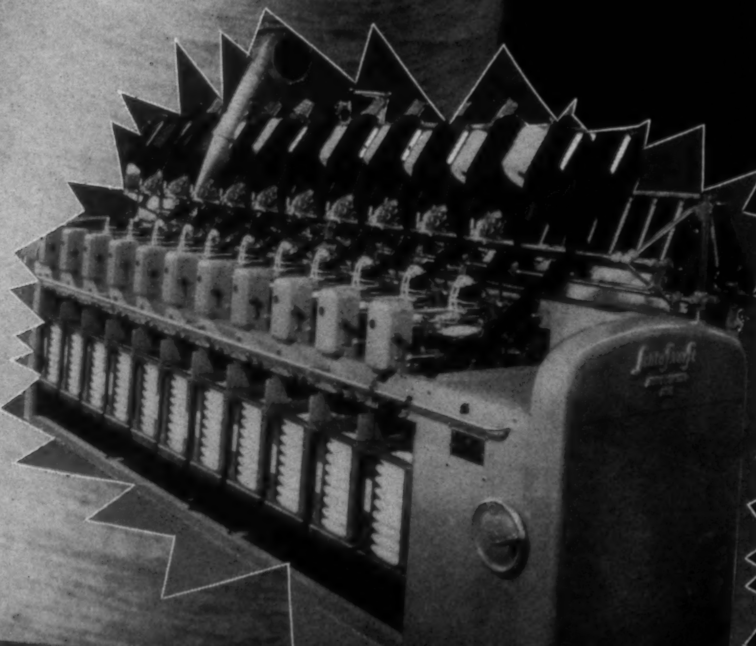

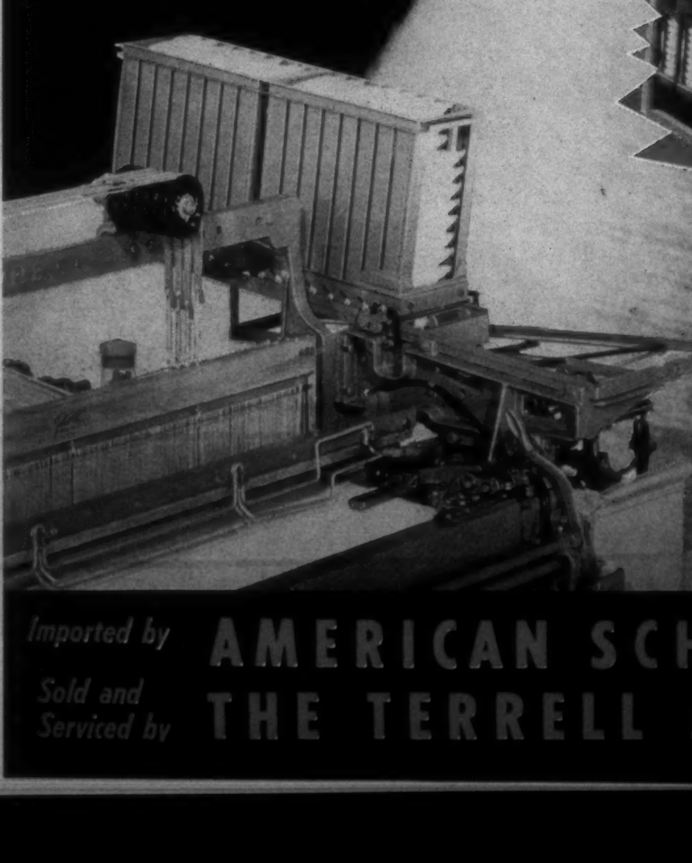

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Two Particular Problems

Of course there have been other problems, and we recognize fully that one is related to the two-price cotton policy and another is related to the heavy concentration of imports in a few specialized fields.

We don't like the two-price cotton policy any more than you do. But finding a solution satisfactory to the cotton growers, the cotton textile producers, the Congress, and other interested parties is, putting it mildly, a perplexing problem in itself. The President has ordered a Section 22 investigation to determine whether or not a fee equivalent to the export subsidy on raw cotton should be imposed on imports, however, and while some of you may feel this investigation does not go far enough, the investigation at least will afford an opportunity to lay the facts on the table.

A heavy concentration of imports in particular product categories can jeopardize those segments of the industry. Actions of the Government clearly show a keen recognition of such problems. I would say, however, that the economic changes in the textile industry are *more* the results of the vagaries of consumer spending, overcapacity, nontextile competition and inter-fiber competition, than import competition.

I have studied statements of the industry and I have studied the pertinent statistics. I have traced the monthly movements of wholesale prices, spindle population, imports, market prices for textile securities, and other similar factors, including announcements of decisions by the Government on textile tariff and quota questions and events overseas which possibly foretell of a boost in imports, and I find no obvious correlation.

In charting the movements of cotton textile mill product imports, production, wholesale prices, and exports on an annual basis for the period 1949 through 1958, I have found that:

In relation to the previous year, in 1950 imports were up, production was up, wholesale prices were up, and exports were down;

In 1951, imports were down—production, wholesale prices, and exports were up;

In 1952, imports, production, wholesale prices, and exports all were down—

and so on, leading me to a conclusion that, on the basis of these movements, there really isn't much of a discernible pattern.

I have attempted to correlate a rise in imports with the market prices of textile securities. In 1957, total cotton textile imports amounted to 143 million square yards. In 1958, the figure rose to 155. In 1959, the volume reached an all-time high of 240 million square yards.

Now how did this fabulous rise in imports affect stock prices? Let's look at the 1957-1958-1959 highs for several leading cotton textile producers.

Burlington Industries rose from 14¼ to 14¾ to 26¼.

Cannon Mills rose from 14¾ to 16⅛ to 29⅞.

Dan River Mills rose from 12⅝ to 14½ to 19¼.

Reeves Brothers rose from 12⅜ to 14½ to 41⅜.

J. P. Stevens rose from 23¾ to 27½ to 34⅞.

United Merchants & Mfrs. rose from 15¼ to 18¼ to 21¾.

Clearly, the increasing volume of imports had no apparent effect—on stock prices.

Today's Business Good

I think you will agree that today the cotton textile industry is not doing badly. Even last year, when imports began to rise to their all-time high, the signs were good.

The *Wall Street Journal* of March 30, 1959, reported that "Textile companies, which tumbled into recession long before most U. S. industries, also are among the front runners in recovery . . . this has brought . . . production speed-ups, bulging order books—and rising earnings."

The recovery is continuing and my good friend, J. Spencer Love, although expressing concern about the rise in imports, was reported in the February 5, 1960, *Daily News Record* as painting a bright picture for '60 for all of the textile field. The textile division of our department's Business and Defense Services Administration paints much the same picture (T.B., Feb. '60, P. 91).

In fact, the picture for all of industry looks bright. President Eisenhower, in his State of the Union Message, said, "1960 promises to be the most prosperous year in our history." Secretary of Commerce Mueller, right here in Charlotte last month, related how our gross national product now is higher than ever before. "By early Fall," he said, "it should hit the half-trillion dollar all-time high altitude mark—the superabundance target of economists over the years."

Good For America

We believe that this country's foreign trade is good for America. We must take this foreign trade seriously.

First of all, it is good for America because it is an important part of the nation's total economy. No one will argue that the textile industry is not an important part of our national economy—it is vital to our everyday living. But by the same token, our country's total sales abroad, our exports, annually exceed greatly the total sales of the entire textile industry—and foreign trade, *too,* is vital to our everyday living.

In 1959, the textile mill products industry employed some 963,000 workers. Each year about 4½ million Americans derive a livelihood from some form of foreign trade.

I hesitate to say that our nation's foreign trade is big business, because actually it is conducted largely by thousands of small and medium and large businesses. But in terms of total volume and value, our foreign trade *is* big business.

We are dependent upon foreign trade for many of our raw materials. Without foreign sources of supply literally tens of thousands of American firms would suffer serious losses. This is because our tire industry must import all of its natural rubber; the paint industry must import all its lac and shellac; the pharmaceutical industry must import all its opium and ipecac; the insecticide industry must import all its rotenone; the tanning industry must import all of its quebracho extract; the furniture industry must import all its rattan and mahogany; the jewelry industry must import all its natural pearls; the metals industry must import all its tin and chromium metal; the fertilizer industry must import all its calcium cyanide, calcium nitrate, and natural sodium nitrate; the food industry must import all its coffee, cocoa, bananas, and tea; and—various branches of the textile industry must import all of their jute, sisal, abaca, carpet wool and cashmere.

These all are items for which U. S. industry is totally dependent upon imports. Imports also account for sizeable percentages of our total supplies of such crucial items as manganese ore, chromite, beryllium, bauxite, nickel, antimony and cobalt.

Imports provide the U. S. cotton textile industry with sizeable proportions of its extra-long staple cotton.

I must say that I was amused last year when several cotton textile producers appeared before the Tariff Commission to *oppose* the increased tariff on extra-long staple cotton which the domestic cotton growers were seeking. That tariff increase, incidentally, was not granted.

Of course, we must have foreign trade. In the complex economics of today's foreign trade neither we, nor any other nation, can afford to sit back and pick and choose what, where and how to buy and sell in international markets. You just can't turn foreign trade on and off like a faucet.

You can't buy if you don't sell—and you can't sell if you don't buy. The importance of foreign trade to our country's continued peace, progress and prosperity even transcends the immediate and measurable economic gains it provides our workers and businessmen.

A Strong Free World

I am convinced that President Eisenhower's defense policies have kept us in a position where we can destroy any aggressor nation in the world at the press of a button, but the recent Russian missile feats certainly point up the necessity for our having friends throughout the world. And trade is the most sensible and sure-fire way in which we can make friends and, at the same time, assure that the free world remains economically strong—strong enough to resist either direct attack or the sly subversion which poverty invites.

The countries most vulnerable to direct attack—as well as subversion—are those geographically situated on the Sino-Soviet perimeter. You are familiar with some of these countries because of their fast emerging textile industries.

Pakistan, for example, is a country where 90 million tough, industrious people literally are lifting themselves from the depths of poverty. Their exports account for a large percentage of their gross national product, but their need for foreign exchange is acute. They must export in order that they may buy the food, machinery, raw materials and other items they absolutely need for everyday living. The Pakistanis like Americans, but if we don't buy the few lines of products they can export, including textiles, they must look for other customers—and the Soviets are nearby, ready and available.

India has much the same situation, only of greater magnitude. Her imports, many from the U. S., exceed her exports by some $800 million annually—a trade deficit of some $800 million a year. The problem is made more serious, however, by her needs for an additional $1 billion in foreign exchange each year for the next five years if there is going to be any increase at all in the Indian standard of living.

Korea has a very small amount of foreign trade, chiefly because a large portion of her former industrial capacity lies in North Korea which now, of course, is within the Sino-Soviet perimeter. But her needs for foreign exchange—to buy such items as agricultural products, metals and machinery from the U. S.—are high. And textiles are among Korea's few earners of foreign exchange.

Hong Kong is another area whose textile and apparel industries pose problems for our domestic industry. But these Hong Kong industries are the major source of employment for the two million refugees who have escaped the yoke of Chinese Communism.

Incidentally, on the basis of my personal on-the-spot survey of Hong Kong's textile industry, I firmly believe that they have the full capacity to produce all of the cotton garments they are shipping to the U. S. And on the basis of thorough investigations conducted by other agencies of our government, I can say that we have not found one bit of proof that Communist textiles are being transshipped through the Colony to the U. S.

Japan does not have the problems of poverty existing elsewhere in Asia, but Japan must "trade to live" and she either trades with the free world or succumbs to the left wing elements within her population and orients her economy to the Communist Bloc. It is just that simple.

Each of these countries is our friend. Each is important to our national survival, which includes the survival of the cotton textile industry. Each of these friendships must be nurtured, and an expanding level of trade among us is the answer to most of our problems.

As we continue our efforts to achieve a greatly expanded level of international trade, however, it is not our purpose to "sacrifice" any U. S. industry. This is how I explained it in Japan last November. I said:

"Our U. S. policy to seek elimination of trade barriers remains unchanged and the tremendous increase in Japan's exports to the U. S. thus far in 1959 and the favorable outlook for the remainder of the year hardly sugest there is a strong sentiment in the U. S. to restrict imports from Japan. Furthermore, we shall do everything within reason to stem the tide of protectionism in the U. S., for there is no future in protectionism for us or any other nation."

Then, I said this:

"We do not intend to see an American industry destroyed by foreign competition, however, and we have adequate safeguards in our trade laws which will be used to make certain that this does not happen. It is our national policy to 'share' our markets with producers abroad, but *not* to 'give' our markets away."

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Now, you, I'm sure, are fully aware of the mechanism available to you for protection against injurious imports. No concession is made on any U. S. tariff until it is proven beyond doubt that the concession will not exceed the limits of the peril point, a point established by the Tariff Commission on the basis of public hearings and other studies. If through changing conditions, a concession results in serious injury, you have resort to the escape clause mechanism. The Tariff Commission right now is conducting an escape clause investigation of typewriter ribbon imports. If you are dissatisfied with these administrative remedies, you can work for the enactment of legislation setting a new trade policy.

In each of these instances, the initiative is yours. But we in the Administration have not been idle.

As a result of our discussions with the Japanese Government, for example, Japanese cotton textile manufacturers now have diversified their exports and have established voluntary quotas limiting the volume of certain categories of textile imports to the U. S. in order to alleviate the ill effects upon certain segments of our textile industry.

I personally have held discussions with the Hong Kong textile industry to explain why it is in their best interests to adopt a similar mechanism of orderly marketing and voluntary restraint. We believe we were successful in obtaining agreement on the principle, and while I know that you in the textile industry are not in complete sympathy with the plan recently advanced by the Hong Kong industry, I think you will agree that it forms a good basis for further discussions.

We in the Administration have taken other actions to assist you in your survival. We have embarked upon some fundamental economic studies of the industry. We have set up a textile advisory committee which the Secretary of Commerce consults in textile matters. We have established a cotton export equalization payment program. And we have done other things, we hope, to your benefit.

Balancing The Scale

In the administration of foreign trade matters we cannot contemplate uneconomic import restrictions in one field, say textiles, that might result in the loss of export sales in another field. Just as the textile industry desires protection, many American industries desire markets. The challenge is to expand our exports while at the same time keeping our domestic industries strong and viable.

The Government is doing what it can to serve your industry. But much of your future depends on the actions you take for yourselves.

Take the field of foreign trade, for example. You have problems; the world's textile productive capacity is growing constantly and each of the other textile-producing countries have dire need for expanding hard currency markets. These problems are countered in major part, by 2 billion "under clothed" potential customers. These potential customers offer opportunities for your survival.

During my trip to some 22 countries on the major continents last year, I talked personally to thousands of businessmen, government leaders, and just plain consumers. I found that there is a tremendous desire for American products, including textiles.

To offer just a few illustrations, the alert American textile salesman might have taken advantage of the following trade opportunities reported to the Department of Commerce last year:

A firm in Thailand wanted cotton and nylon underwear for men and women on the basis of continuing $5,000 shipments.

And listen to these opportunities in England:

Cotton and rayon fabrics, dress weight, plain dyed and printed, weight from 4 to 8 ounces per square yard, lower to medium quality;

Nylon fabrics for lingerie, blouses, etc., for women, of medium quality desired for direct purchase;

Fabrics for fashion dresses, lingerie and children's wear, including woolens, silks, cottons, synthetics, etc., desired for direct purchase and agency;

Continuing England's published requests:

Textiles for soft-furnishings, including cottons, synthetics (nylon, Dacron, etc.) for quilts, curtains, bedspreads, covers, and all soft furnishings for use in manufacture, approximately 20,000 to 100,000 yards per fabric in all qualities and price ranges desired for direct purchase and agency;

Fabrics, 67% Dacron, 33% cotton for use in manufacture of raincoats for direct purchase; and

Textile piece goods, made of wool, cotton and rayon, suitable for coats, suits, dresses and shirts for women, for direct purchase.

These are new markets opened up by the removal of import restrictions.

A firm in Germany wanted cotton and rayon print cloth for cloth printers. Germany has lifted its import restrictions against U. S. textiles and we're told that opportunities there abound—for the alert salesman.

Australia, too, has lifted its import restrictions on American Summer-use textiles, and our Consulate in Canberra reports a growing demand there for American cottons and synthetics. Quoting from a Foreign Service dispatch, "This is a lucrative market which requires attention."

And, as I've said, these are only a few illustrations.

Change is inevitable; price, of course, is a feature. But American textiles, because of their styling, quality, and advanced technology, are both wanted and saleable in world markets.

Some of you may be familiar with my ideas on how American producers can increase their export sales. So rather than repeat them, I want to quote from the keynote speech of Mr. Carl R. Harris, the president of the Southern Textile Association, when he opened the association's 21st annual meeting in Asheville, N. C., on July 5, 1929. In 1929, this is what he said:

"Today as never before we are feeling the effects of keen competition in foreign markets . . . We can meet our part of this in two ways.

"First, by producing goods of superior quality. This should be an easy matter with our educated and highly skilled Southern born people to man the operations.

"Second, we must find ways and means of lowering our manufacturing costs. This is the difficult task that must be accomplished and at the same time not only retain, but raise the standard of living of the people."

This advice is 30 years old, but it's still good today. To these points I can add only the necessity of effective salesmanship—the need for total marketing.

Last year, total United States exports of cotton cloth were valued at $123 million. This year, that figure can be increased substantially—if you in the industry decide you want it increased and will do something about it.

What Can Be Done?

The review of observations just presented would be a futile exercise if its only purpose were to justify governmental actions and policies. May I therefore submit some recommendations based upon this comprehensive study.

Let us adopt the premise that we all are interested in survival, physical, political and economic—but few people in this audience will admit satisfaction in the status quo—or less. It is a law of nature that the absence of progress produces decline—and certainly it has been American tradition to strive for higher standards of living, better products, more sales—in other words, progress. How then can we advocate a program of restriction in trade either domestic or foreign—for trade is the means by which progress is transmitted into reality to the people.

Market opportunities for the cotton textile industry, as well as for other U. S. industries are opening all over the world. American products, with their superior quality, advanced styling, and wider range of choice, are admired the world over.

Price is one important factor—but only one, and there is no tangible proof that "industry wide" our prices are excessive. Some elements of the American textile industry have countered lower wage rates with greater efficiency, lower cotton prices with greater volume and advanced technology. And even where prices are difficult to meet, superior merchandising can often develop markets by pointing up the other salable qualities of our products.

Very little of the world's commerce moves on price alone.

Steps must be taken to redouble your efforts in research and product development. The shining example of drip-drys and wash-and-wears shows how whole new vistas can be opened up through full product development. A person would have to be a rank pessimist not to believe that there are many more such products awaiting discovery.

The proportion of national expenditure for textile products must be increased. Competition with other dollar consuming products—such as housing, entertainment, transportation, travel—must be met with determination and imagination. Outward-looking, optimistic, vigorous sales effort can, without doubt, add to the sales potentials of your industry.

Our national prosperity, safety, and well-being depend upon enlarging our economic base. Let's stop worrying about getting a larger share of a smaller market—and devote our thought and energies toward building a bigger market—for therein lies our future!

Are You Reducing Costs Systematically?

A PROPERLY ADMINISTERED COST REDUCTION PROGRAM CAN SAVE YOU MORE MONEY THAN YOU MIGHT THINK

By **J. L. ALEXANDER***

COST reduction is not a new idea to any conscientious foreman. Indeed, cost reduction is an integral part of the foreman's job and determines his personal success as well as that of his company. A formalized cost reduction program was organized at North Carolina Finishing Co., Salisbury, N. C., to encourage this cost-consciousness and to assist the foremen in reducing plant costs. After the first 12 months of operation, the company's cost reduction program was credited with savings amounting to more than 50% over the goal set (5% of the annual cost of all labor, material and supplies).

The N. C. Finishing Co.'s foremen's council (composed of department heads) requested formation of this program in January 1957. This request followed presentation at the plant of The Du Pont Co.'s cost reduction program by Roy M. Barnes Jr. N. C. Finishing's executive council set-up the organization, made committee assignments, and directed introduction of the program to the general foremen.

The following operating procedure was formulated to direct organizational efforts.

I. Purpose

To promote savings in materials and labor through constant efforts toward their economy.

II. Organization

A. Co-ordinator
  1. Responsible to the vice-president and general manager through the treasurer and superintendent of services.
  2. Duties
    a. co-ordinate and promote committee activities
    b. plan training and publicity as necessary
    c. keep files on all activities of organization
    d. meet with committees when necessary
    e. follow up activities begun by committees
    f. keep information available for top management concerning progress of program
    g. report monthly to executive committee

B. Assistant Co-ordinator
  1. Duties
    a. act as secretary for all meetings called by co-ordinator
    b. assist co-ordinator in carrying out duties above

C. Area Committees (from general foremen group)
  1. chemicals and dyestuffs
  2. labor
  3. returns and cloth
  4. paperwork and supplies
  5. preventative maintenance and utilities

D. Departmental Committes (from foremen group)
  1. each general foreman will appoint a cost reduction committee from supervision within his department.

III. Operation

A. Meetings
  1. committee chairman will meet with co-ordinator and assistant co-ordinator twice monthly.
  2. committees will meet as necessary to carry out activities.

B. Suggestions Handling
  1. Committees will outline proposed changes showing present procedure, recommended change, and estimated savings where possible. Such proposals will be submitted to co-ordinator in duplicate (one copy to be filed by co-ordinator, other to be initialed, passed to supervisor or staff member concerned, and returned to committee for action).
  2. Proposed changes will be discussed with gen-

A cost reduction program should have a co-ordinator to organize, promote and follow-up all activities.

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*Purchasing agent, North Carolina Finishing Co., Salisbury, N. C.

HELP REDUCE COST!
PLANT BUGLE
HOW WE HAVE REDUCEI COST
WIN$
WITH YOUR COST REDUCTION IDEAS

Dynamic publicity is necessary to put across a cost reduction program.

eral foreman involved and if necessary, superintendent or plant engineer.

3. In cases of overlapping activities (those involving two or more committees) the cost co-ordinator will designate one committee for a final responsibility and follow-up.

C. Monthly summary of individual committee activities will be sent to co-ordinator by first Wednesday of accounting period. Copies of all reports to supervisors and staff members will also be sent to cost co-ordinator.

4. Departmental committees will be responsible for cost saving suggestions from the supervisory group in their departments. The general foreman of each department will act as advisor. Suggestions from these committees will be sent to co-ordinator, then to committee involved for investigation and action.

The initial presentation of the program was made to the general foremen by J. H. Riddle, vice-president and general manager. About one month of operational progress ensued before Mr. Riddle introduced the rest of the supervisory force to the program. It was felt that the program should operate for a few months and "get on its feet" prior to a formal announcement being made to all other employees. Having the program announced by Mr. Riddle accomplished the intended purpose of informing N. C. Finishing's employees of the vital interest of top management in reducing plant costs.

Presentation of the program to the final group, hourly employees, occurred in September 1957 after five months of successful operation by the supervisory force. Introduction to this group was made by:

(1) A letter from Mr. Riddle to every employee stressing the importance of cost reduction to each of them from the standpoint of job security.

(2) Announcement in the plant newspaper giving the organizational set-up and naming committee personnel.

(3) A contest to name a humorous Scotsman drawn by an employee and used as the figure identifying cost-consciousness in the plant.

Goals Set

Goals were set early in the program to determine progress. They were set on an annual basis and were arrived at on the basis of 5% of the estimated annual costs of labor plus materials (dyes, chemicals, etc.) plus supplies (machinery repairs included). Every cost of operation other than taxes, insurance, depreciation, and other overhead items was included in determining goals.

Efforts for the first year of operation resulted in goals being surpassed by about 50%. Goals were raised to 7.5% of the costs listed above for the second year. These were exceeded by some 29%. Goals for the current year are again 7.5% of controllable costs.

Publicity for the program is under the general supervision of the co-ordinator. A publicity committee was appointed early in the program to: (1) work with area committees on monthly projects emphasizing that committee's

SAVINGS IDEAS

THE fine record of cost reduction by the N. C. Finishing Co.'s program was achieved in a large portion by a number of seemingly minor savings. A few examples of ways the company saved money are contained in the following paragraphs. The company emphasized that small savings ideas are important and amount to a great deal of money if enough of them are put into practice.

Savings Idea No. 1—Repair Own Valves—Considerable savings are being realized in the mechanical department by repairing worn valves whenever possible. Formerly, valves needing repairs were sent to an outside repair shop. Under the new set-up, at least 50% of the valves worn out in the finishing plant are repaired by the company's own shop.

Savings Idea No. 2—Pressure Sensitive Tape—Both the company's finishing departments and the stock room have come up with sizeable savings by using ½-inch width pressure sensitive tape instead of the ¾-inch width tape formerly used. It was found the ½-inch does just as good a job and is less expensive.

Savings Idea No. 3—Water—A mercerizer operator noticed that water from the mercerizer cooling cans was allowed to drain after use. He suggested that this water be used in the rinse box for cloth coming into the mercerizer from the continuous boil-off machine. A water pipe was installed in about two hours to implement the idea and a saving of approximately 15,000 gallons of water per year resulted.

Savings Idea No. 4—Chemical Spillage Guard—A simple guard attachment was put on a tenter frame to prevent spillage of chemicals and permit increased machine speed. An estimated saving of $2,000 per year resulted. A similar guard was built on continuous dye machine with an estimated saving of $1,000 per year.

Savings Idea No. 5—Rolls—Worn out rolls from the company's two mangles were re-made into narrow singer spares and the steel from these rolls is being re-used as spiral gears for the mercerizer. The use of these worn rolls has netted a saving of $1,400.

activities; and (2) suggest original ideas for keeping the program before the plant personnel.

Publicity has been carried out through the following media:

(1) Plant Newspaper—Wherever practical, cost reduction ideas put into operation showing comparisons of costs between items used in the plant and groceries, furniture, automobiles, etc., were used. Annual costs of items of large consumption have been shown with pictures of employees using or handling them.

(2) Bulletin Boards—Information on costs of various items used in each department have been posted. Posters with catchy slogans have also been useful.

(3) Contests—Two cash awards contests for cost reduction ideas (only non-supervisory employees eligible) have been conducted. First, second and third place prizes were awarded.

(4) Cost Reduction Sign—A large wooden sign picturing cost reduction themes has been used since early in the program. It is situated just inside the main entrance to the plant in ready view of the employees as they enter through the clockhouse. The sign is repainted each six months or so with a new idea on cost reduction.

Progress Reports

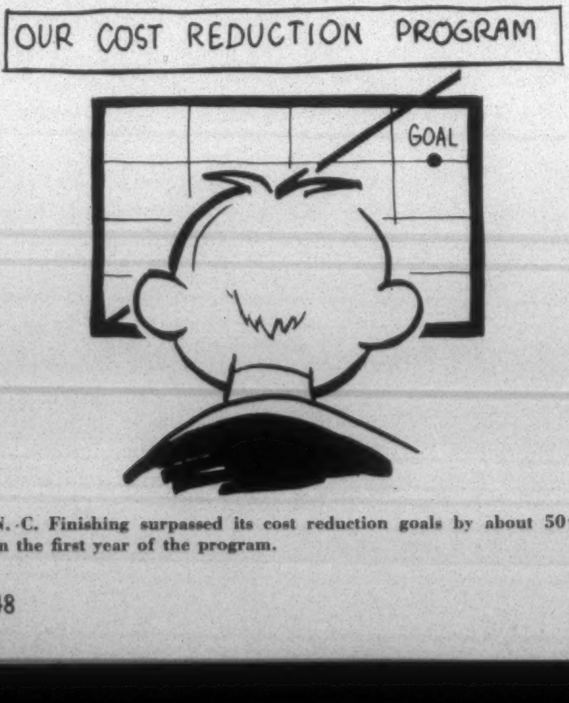
As outlined in the operating procedure, monthly progress reports are presented by the co-ordinator to the executive council. These reports include:

(1) All ideas put into operation to reduce costs, with the name of the person responsible and an estimate of the annual dollar savings.

(2) Projects of area committees, planned and/or operating.

(3) Evaluation of committee progress and commendation for outstanding individual performance in reducing costs.

(4) An analysis of progress for the current year showing estimated annual savings to date, goals to date (for portion of year completed), and per cent realization for the year to date. The percent realization is savings to date + goals to date. For example, if annual goals are $100,000, the year is half gone, and savings on an annual basis are $45,000, the per cent realization would be $45,000 + $50,000, or 95%.



N. C. Finishing surpassed its cost reduction goals by about 50% in the first year of the program.

(5) Any other pertinent data on the program in particular or cost reduction in general.

Estimates of annual savings for a cost reduction idea are sometimes difficult, often impossible, to compute, particularly in a commission dyeing and finishing plant. Savings in usage of dyes or chemicals is computed either on the basis of past usage, or on a calculated estimate of the amount to be used for the next 12 months. Improved processing of a particular fabric entails an estimate of the amount of this fabric to be processed in the future—at best, a sometimes inaccurate guess. For this reason, all reported savings are reviewed at the end of each year and corrected, as nearly as possible, to actual savings.

Ideas that are certain to reduce costs, the extent of which is impossible or impractical to compute, are reported with no estimate of annual savings shown.

Disposal of surplus inventory (chemicals, dyes, supplies, or equipment) is reported with no savings shown. No savings is computed on closing open valves or faucets, repair of leaking pipes, valves, etc.

In the case of savings not directly attributable to efforts by program personnel, a different procedure has been followed at N. C. Finishing. A case in point is the current revision in plant layout, planned for several years by management, and begun during 1959. At the beginning of this project, an estimate was made of the savings to be realized as a result of it. Annual goals for the cost reduction program were increased by the amount expected to be realized during the current program year, and annual savings for each part of the project are reported as it is completed.

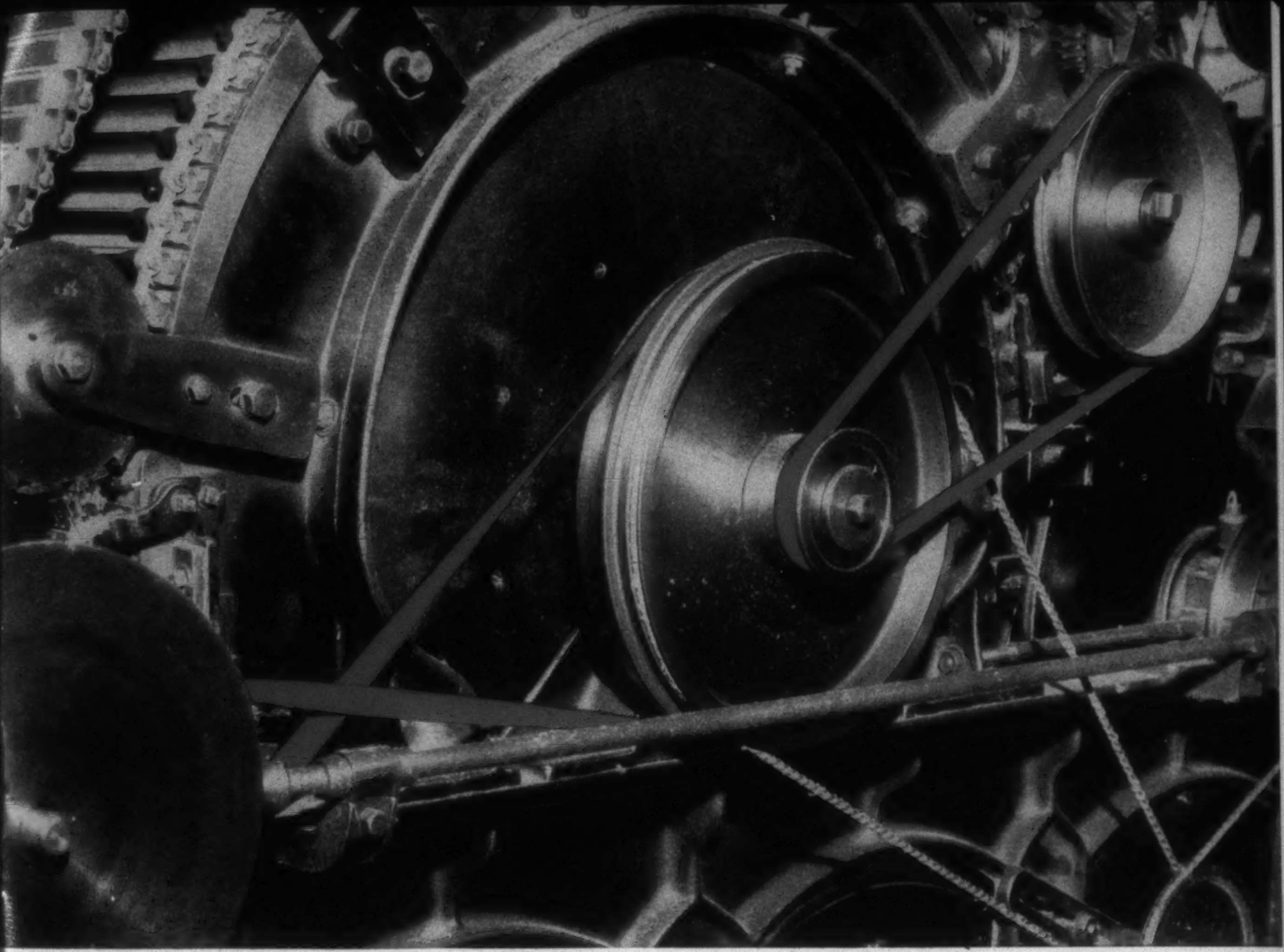
It is the writer's opinion that any program for reducing costs must be flexible. Revisions in operating procedure have become necessary at N. C. Finishing and they will continue. Computing of estimated savings, decisions on what should or should not be reported, handling of controversial suggestions for reducing costs, variation of approaches to publicity and committee activities so as to maintain interest—all these require an organization that can be altered as required, and sound judgment must be used by those responsible for its success.

An example of the flexibility of the cost reduction program at N. C. Finishing is just being instituted and cannot yet be evaluated. Until January 1960, area committees had been headed by, and composed of, general foremen only. To inject fresh ideas and enthusiasm in the program, assistant foremen were appointed to handle the five area committees. Committees comprised entirely of assistant foremen is a new approach for N. C. Finishing, but the interest evidenced already by these foremen indicates certain success.

Finally, it would seem there are two prime requisites of any cost reduction effort, formal or informal, that should be re-emphasized:

(1) Complete support and continued emphasis by top management; and (2) dynamic publicity. Cost reduction can fail even with these characteristics, but they *cannot succeed without them.*

Acknowledgement: The writer would like to acknowledge, with thanks, the assistance of The Du Pont Co. for its assistance in organizing the cost reduction program at North Carolina Finishing Co.; and particularly the help of Roy M. Barnes Jr., promotions manager, Organic Chemicals Department, and the cost reduction personnel at Du Pont's Chambers Works, Deepwater, N. J.



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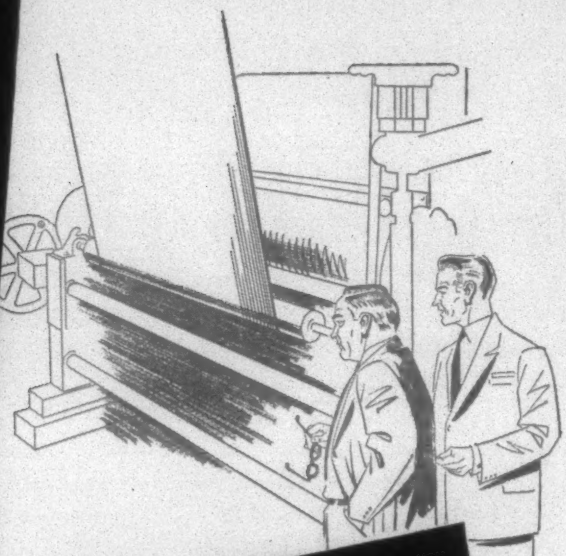

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Kendall's Bethune Finishing Plant Is Designed For Speed And Efficiency

THE KENDALL CO. spent some $9 million to make its big new finishing plant at Bethune, S. C., one of the most economical finishing operations in the U. S. Emphasis on every phase of the planning and construction, from plant-site selection to finished goods shipping, has been aimed at speed and efficiency. The 330,000-square-foot plant is modern in every way.

The story of the new plant begins with original site-selection, begun in 1953, when the company decided it must have modern finishing facilities near its greige mills—all of which were located, at that time, in the Carolinas. The Kendall Co. searched hundreds of possible plant sites seeking one which: (1) was situated favorably with respect to the greige mills; (2) had availability of economically priced fuel; (3) had possibility of lost-cost waste disposal; (4) had availability of adequate (though largely untrained) labor supply; (5) had certain topography characteristics and soil conditions; and (6) possessed community advantages. The Bethune site filled the bill.

A plentiful supply of very good water is available to the Bethune Plant from six driven wells. The wells provide about four million gallons of water per day. The water does not require softening. The only water treatment necessary is to get it off the acid side, normally the case with ground water. Of course, chlorination is neccessary for sanitary purposes. The plant is currently using about 1½ million gallons per day.

A plentiful supply of labor in a 20-25 mile radius of Bethune is seen from the fact that 2,200 persons applied for jobs when the company started hiring for its new operations. The Bethune Plant currently employs about 350 workers. A very small percentage of the employees now at the plant had ever worked in a finishing plant before so the company had to enter into an extensive training program. A few key personnel were brought in from The Kendall Co.'s New England finishing plants but the rest of the operating force are local people.

Transportation

A finishing operation designed to finish up to 130 million yards per year must be geared to convenient and economical transportation. The Bethune Plant is located on the main line of the Seaboard Airline Railroad and adjacent to U. S. Highway 1. Goods are shipped by both rail and truck. Railroad sidings run right up to the side of the plant. Railroad car loading is done with battery operated lift trucks. All finished goods cartons are palletized. There are also a number of truck loading docks situated so goods may be loaded by fork truck directly from storage racks. Incoming greige goods from the company's greige mills are handled in custom built contract trucks that allow the cloth to be shipped unwrapped. The warehouse includes over 90,000 square feet and is about equally divided between greige and finished goods. Finished goods pallets are stored in four high racks. The overhead clearance in the warehouse measures 24 feet.

Some finished goods destined for the West Coast are shipped by truck to Charleston, S. C., and Norfolk, Va., and thence by boat to the Coast. Freight from Bethune to all points in the U. S. is on the same relative basis as similar finishing plants in the South.

The greige goods warehouse at the Bethune Plant occupies some 48,000 square feet. Rolls of fabric are handled on battery operated trucks. While the amount varies, considerable quantities of fabric are purchased from greige mills other than those of The Kendall Co. (rolls wrapped with burlap tubing).

Flexibility

All of the processing equipment in the Bethune Plant is designed for extreme flexibility and speed due to the nature of the company's business. A number of different finishes are applied and practically all of them are in extremely competitive markets. Generally, the production falls into four classifications:

1. Nursery Products
   - a. gauze diapers of various styles. Packed in cartons for retail trade—some printed and some pastel dyed for gift trade. New stretch weave diapers introduced recently.
   - b. nursery pads
   - c. stock and ship baby knitgoods, disposable diapers and crib sheets.
2. Interlining Fabrics
   - a. men's shirts
   - b. women's wear
   - c. men's suits
   - d. Perx, a patented fabric which is stiff in one direction but not in the other. Perx is used as an interlining for men's jackets and caps.
   - e. waistband
   - f. bias binding
3. Fabrication Goods
   - a. poplins, broadcloth, prints and sheetings for uniforms and other women's wear. These goods are almost always bleached and Sanforized and they may be dyed or wash-and-wear finished.
4. Industrial Fabrics
   - a. coating trade products from adhesive tape to auto tops
   - b. filters
   - c. buffing cloth
   - d. hospital products such as surgical dressings

The industrial goods finished at Bethune are usually bleached and/or dyed before special preparations designed for particular end-uses. A special product for the Kendall

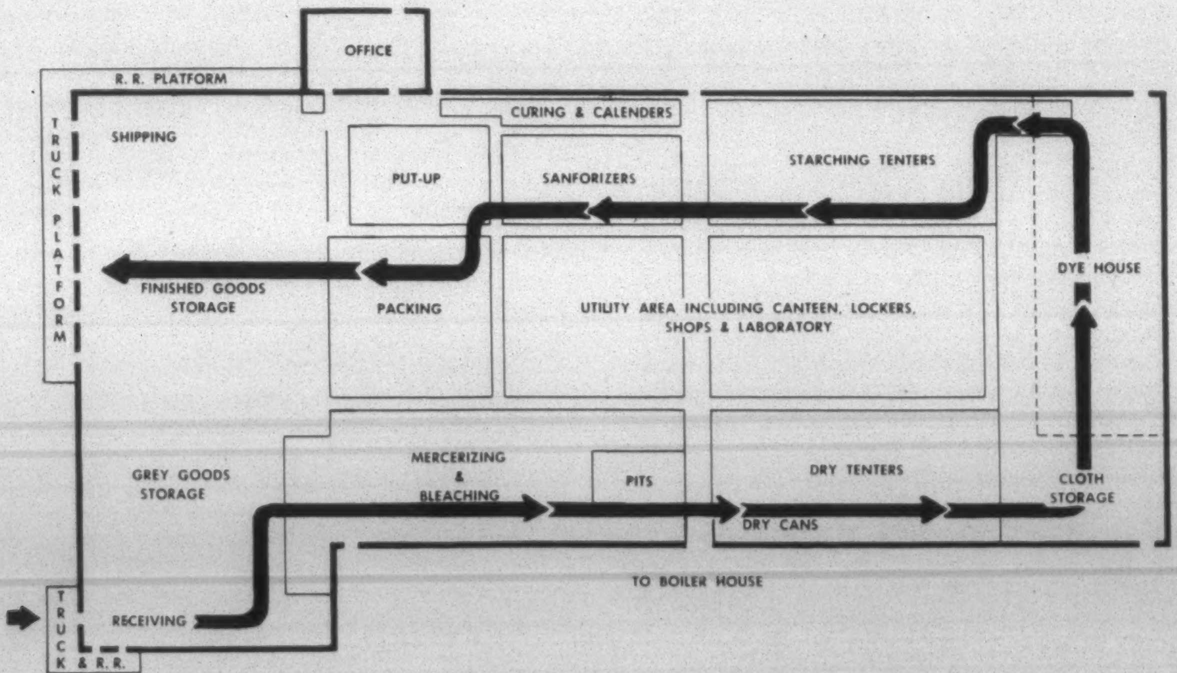


Fig. 1—The "U" arrangement of material flow at Bethune allows goods to be run with a minimum of backtracking. The "U" shape also permits the plant to be expanded in any direction without moving a single machine or department.

drygoods department is the patented Kendall Dish Towel.

All the company's nursery products are marketed under the Curity label. Other trade names associated with the company's goods are Kendall—dish towels and milk filters; Canvex—interlinings; Perx—interlinings; Curity—surgical dressings; Curad—adhesive bandages; Rymplecloth—polishing fabric; Blue Jay—foot products; and Webril—nonwoven fabrics.

The Shape Of Things

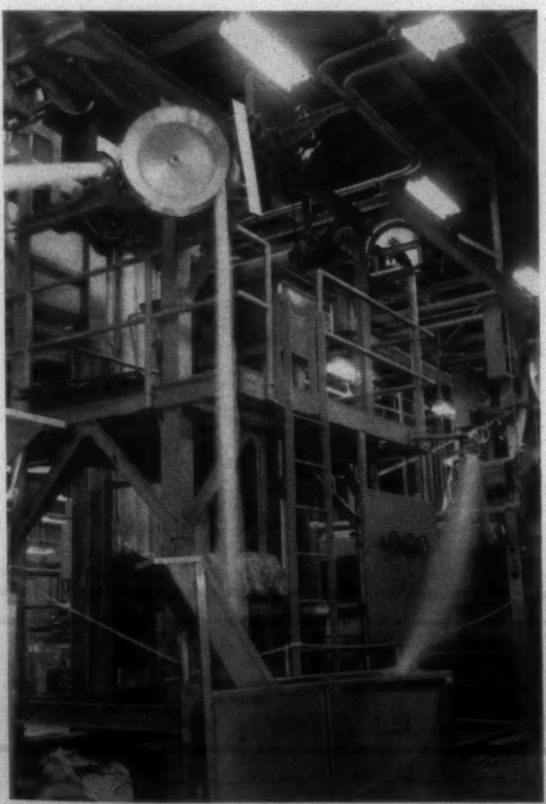
Material flow throughout the big finishing plant runs in the general shape of a "U" (Fig. 1). Processes are so arranged as to require a minimum amount of backtracking of goods. Greige and finished goods warehousing is located at the same end but on opposite sides of the building. Railroad and truck loading platform locations can be seen in Fig. 1.

Because of the "U" shape, the plant can be expanded in any direction without moving a single machine or department. In fact, at present a second bleaching range is being installed without interruption of other processing. The rear wall of the building is temporary for expansion purposes. Other walls are permanent and have brick exterior and glazed tile interior for ease of maintenance. The building is windowless, well-lighted, and ventilated by filtered air which has been washed and cooled by pure water.

All utility departments are located in the center of the "U" shape. This position makes possible the shortest distances for electrical lines, and closest possible location to operating departments for maintenance men and work shops. Toilets, lockers and a canteen are also located in the central area.

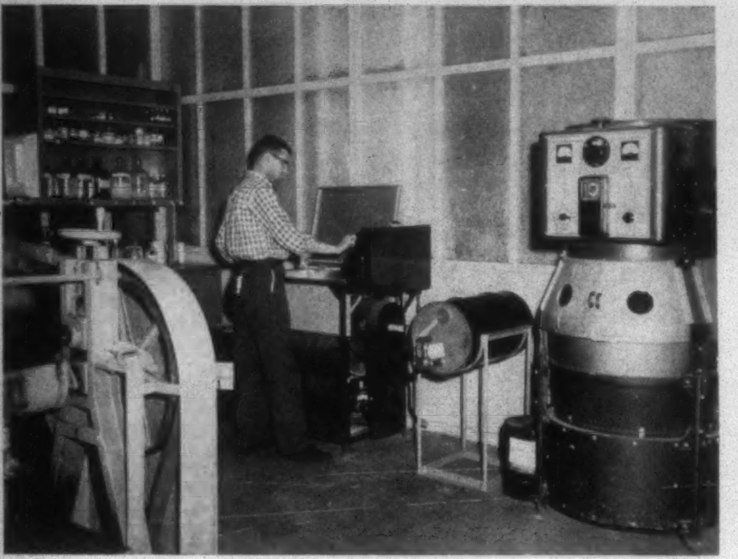
The entire boiler plant is in a separate building because if included under the same roof, it would have limited

Cartons of finished goods are stacked four high in racks in the Bethune Plant's 45,000-square-foot finished goods warehouse. Battery operated fork trucks with telescoping masts are used to handle the goods which are mounted on pallets. The entire warehouse area has a 24-foot overhead clearance.



Designed for complete flexibility, any of Bethune's bleaching range J-boxes can be by-passed if desired. Actually, the J-box being bypassed here is undergoing servicing; however, any unit in the range can be operated individually if necessary.

Bethune's Becco System continuous bleaching range *(background)* has four J-boxes and operates at speeds up to 250 yards per minute on fabric up to 60 inches wide. Weight of goods ranges from 2.5 at 12.0 yards per pound. With five pushbutton control panels, the range may run goods either single or double strand. A second bleaching range, to be used for light-weight goods, is being installed *(foreground)*. As with the plant as a whole, the new bleaching range has been designed so that it may be enlarged at a later date.



A completely equipped dyehouse laboratory at Bethune does shade matching and strike-offs on new cloths. The lab is also used for Launderometer and Fade-Ometer tests as well as crocking and other process control work.

expansion possibilities of both finishing and boiler plants. The boiler plant operates on natural gas or coal.

Becco System Bleaching

To provide the speed and flexibility required, the Bethune Plant has a Becco System continuous bleachery with four J-boxes. The range is capable of running goods up to 250 yards per minute and 60 inches in width. Goods may be run single or double strand and any of the units in the range may be by-passed if necessary for shortened processing. Fig. 2 is a simplified view of one of the possible string-ups used. The cloth (A) leaves unwind stand (B) and goes into scray (C) which provides storage so that the range can run while stops are made to sew on new rolls.

Passing through the singer (D) where fuzz is burned off, the goods are dipped in a quench box (E) to extinguish sparks and saturate with caustic soda solution. The goods then go over a reel (F) and are deposited in rope form in the caustic J-box (G). Goods stay in the J-box under steam for about one hour while caustic acts on sizing and waxes and other natural impurities in the fiber, rendering the fabric more absorbent. The wastes resulting from this chemical action are washed out in the many immersions in the rope washers (H) and (I). Squeezes at the end of each wash remove excess moisture and make the goods ready for the next immersion.

Bleaching chemicals are picked up in the saturator (J) and act on the cloth during an hour spent in the steam heated J-box (K). After a final washing in a rope washer (L), the goods are plaited into a tile-lined white goods storage bin (M), still in rope form, to await drying.

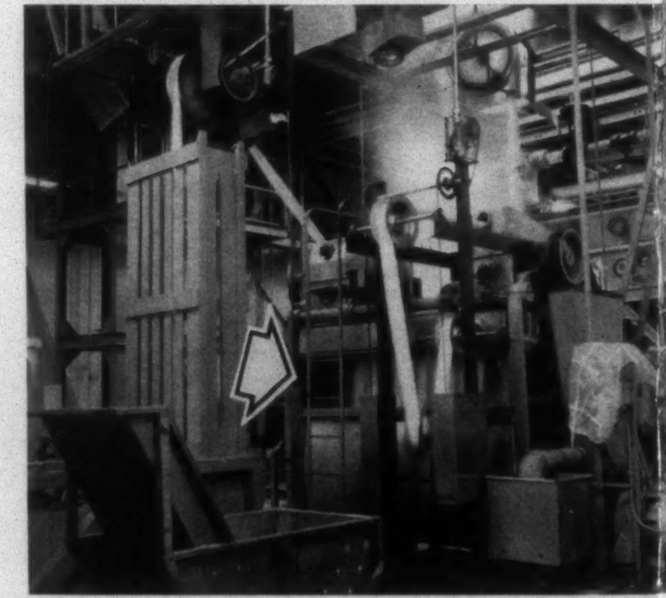
The entire bleaching range is pushbutton controlled from five conveniently located panels. Goods by-pass given units in the range through the use of reels, pot-eyes, and portable stainless steel scrays.

Goods pulled from the storage bins are dried on tenter frames and rolled on rolls or are plaited into boxes. For some goods the tentering is the final operation in finishing. For other goods, destined for dyeing, finishing, Sanforizing, it is only the first step in many processes.

Following bleaching, some Kendall goods are mercerized for added luster, strength and affinity for dyes. Mercerization is done by saturating goods held under tension with a strong caustic solution. The goods get a thorough washing while held in tenter clips and resume rope form for storage in bins. Goods are then dried on tenter frame.

Continuous Dyeing Range

Various kinds of dyeing are done at the Bethune Plant. The units of the continuous dye range, which can operate



At the delivery end of Bethune's bleach range, the goods get a final washing *(arrow)* and are stored in ceramic tile-lined bins. Bleached goods are later pulled from the bins, framed and dried. For some classes of goods the finishing operation is completed after framing while others are dyed and given further processing.

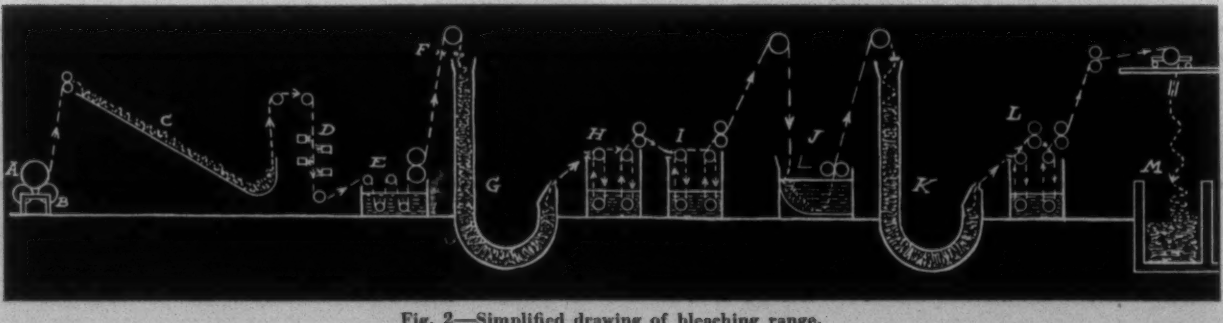
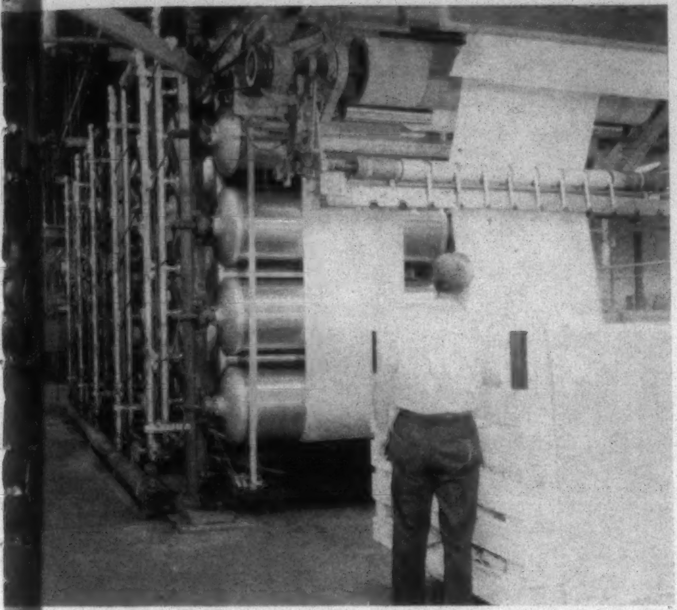


Fig. 2—Simplified drawing of bleaching range.



Bethune's continuous dye range delivers goods from this stack of 80-pound steam pressure dry cans at up to 200 yards per minute. The dye range has a telephone communication system to three stations up and down the line as well as the department office.

at 150 yards per minute, are set far apart to allow for flexibility. The first part of the line can be used separately for commercial and pigment dyeing while the latter part of the range is used for dyeing and/or open width soaping. The full range is in operation when dyeing vat, sulphur or naphthol colors.

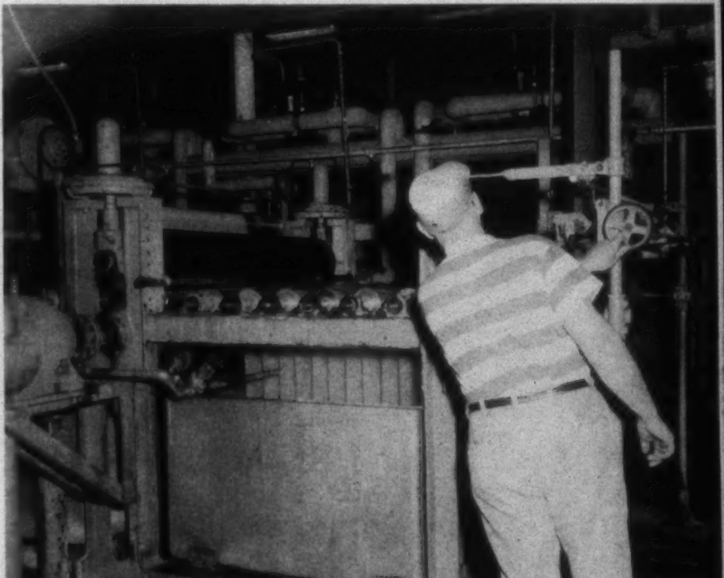
The dye range has two pads, one conventional type with an electric heat pack to pre-heat goods before drying, and a Williams unit for vats and sulphurs. Also in the dye range are a steamer, open-width washers and stacks of 80-pound steam pressure cans. The first section of all stacks of cans at the Bethune Plant are Teflon coated.

Vat dyes are fast because they are insoluble in their normal state. Bethune first pads this insoluble form as a dispersed pigment on bleached and dried goods. The goods next run through a pad for the pick-up of reducing chemical. The fabric then enters a steamer where a steam saturated, oxygen-free atmosphere at a minimum of 214 degrees F. allows the reducing chemical to convert the dye into a soluble compound. This soluble compound is absorbed into the fiber.

Emerging through a water seal, the goods enter open-width washers where the dye is oxydized to its original insoluble state. The chemicals are neutralized and the fabric is thoroughly washed. The goods are squeezed between washer boxes, given a final rinse on a water mangle, dried on cans, and are plaited into trucks for further finishing operations.

Finishing Ranges

The application of finishes such as starch and resins, for wash-and-wear, normally follows dyeing at Bethune. Fig. 3 shows a simplified diagram of Bethune's finishing ranges. Tenters are 120 feet long and the ranges have stacks of 80-pound drying cans (with Teflon coating) to allow operating speeds up to 200 yards per minute. In normal finishing the cloth in truck (A) is pulled over the tension bars (B) through a padder (C), which is fed from either of the tanks (X) on the platform above by automatic valve (D) through pipe (Y). The weft-straightener (E) brings warp and filling threads to right angles so the fabric is bias-free. The weft-straightener consists of a bank of lights bringing the fabric to a high illumination and a set of two photoelectric cells. The photoelectric cells "see" the weft line and relay information to motor-driven correcting rollers if the line is not straight. After weft-straightening, the fabric gets a partial drying on cans (F) and goes into the tenter frame (H). In the center the fabric is subjected to a continual blast of hot air circulated by centrifugal fans. Dry as it emerges from the tenter housing, the cloth is released by the clips and can either be wound in rolls on batcher (I) or plaited into box trucks by folder (J). Tentering gives the uniform width required in any finished put-up.



The Bethune continuous dye range has seven open width box washers.

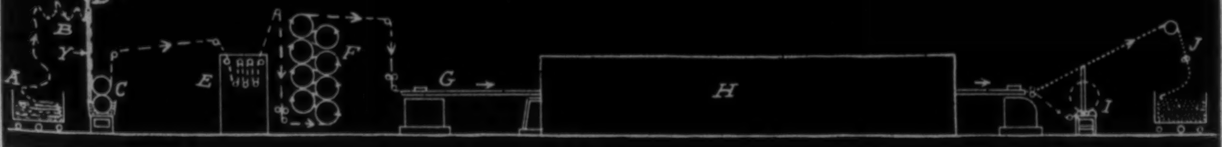


Fig. 3—Simplified drawing of finishing range.

Other Finishing Equipment

Other finishing equipment at Bethune includes Sanforizers, and plain, chase and friction calendering. In Sanforizing, the fabric is dampened and set at proper width before being fed between a thick rubber belt and a heated cylinder. The type of belt surface compels the fabric to cling tightly. As the curvature of the belt changes in leaving the drum, the surface on which the cloth is riding becomes shorter and the material is correspondingly shrunk. The effect is further aided by the curvature of the belt being reversed as it travels onto the cylinder. A delicate speed adjustment permits transferring the cloth to other heated drums without any stretching, so that none of the shrinkage is lost. The dried cloth is plaited onto trucks ready for final put-up operations.

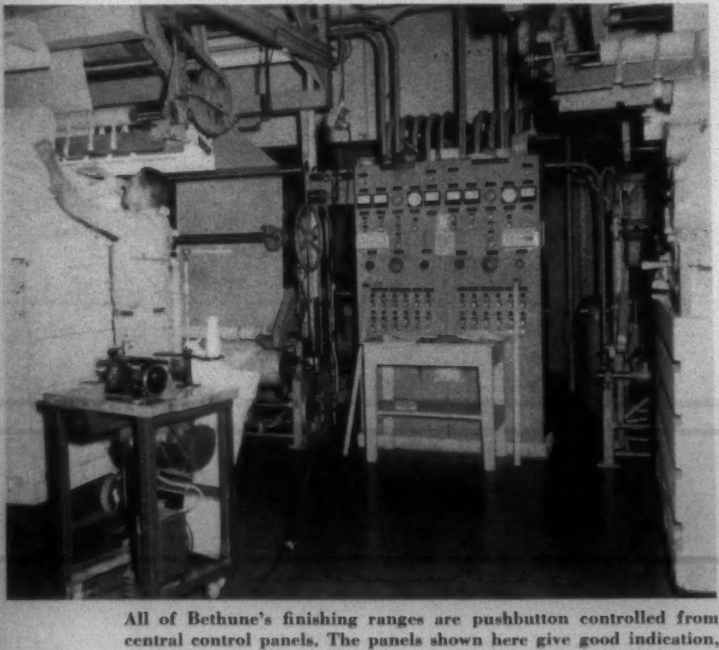
Chase calendering done at Bethune imparts the thready appearance of poplin to fabrics. It is done by running five strands of cloth on top of each other. Friction calendering imparts a highly glazed appearance to goods usually going into the furniture trade.

The laboratory at the Bethune Plant does product development, plant service and technical service work. The laboratory has a staff of six and is equipped with miniature padders, coaters, drying ovens, abrasion testers, colloid mills, extractors, and a muffle furnace for determining the inorganic content of a fabric. Other physical testing equipment includes tensile strength testers, stiffness gages and tear testers.

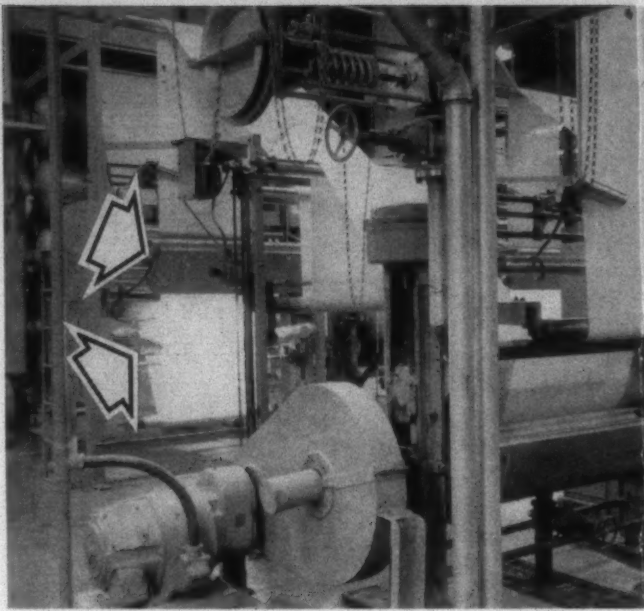
The lab controls waste and water, evaluates new chemicals, and checks incoming finishing materials as well as finished fabrics. The lab works closely with the company's market research department toward the goal of tailor-making the right fabric or finish to a particular market need.

Communication System

The location of the Bethune plant in South Carolina, far removed from Kendall's main sales offices in New York and Walpole, Mass., posed a problem in communications to insure same day service to customers. It was solved by a private leased Western Union teletype wire service connecting both offices with the plant and the full utilization of five channel perforated tape and specially designed forms to gain high speed transmission and accuracy. The equipment at Bethune consists of four teletype machines for receiving orders, two send and receive teletype machines for message traffic and one off-line punch tape perforating machine.



All of Bethune's finishing ranges are pushbutton controlled from central control panels. The panels shown here give good indication, show amperage for the generators and motors, and provide speed control for the range and drying fans. Red lights indicate instantly to the operator which fans are running.



The finishing ranges at Bethune have 120-foot tenter frames, stacks of 80-pound steam cans, run at up to 200 yards per minute, and are all equipped with weft straighteners. A bank of lights *(top arrow)* brightly illuminates the surface of the fabric allowing the photoelectric cells *(bottom arrow)* to "see" the weft line. The photoelectric cells relay information to motors and rolls for automatic straightening of the weft.

An order may originate in any of the company's district sales offices throughout the nation but each must funnel through either the New York or Walpole main offices. There complete files of customer pre-punched tapes containing all of the constant information—such as invoicing address, ship to address and items ordered—are held. When a sales order is received the corresponding customer tape is pulled and on a flexowriter a new tape created with the variable information peculiar to that particular order, such as date, shipping order number and quantities ordered, then added. The shipping order tapes are then fed into the Western Union machines for transmission to the Bethune plant simultaneously creating the shipping order form set at both ends of the line. The order is received at Bethune on an eight part form set consisting of five copies of the shipping order and three copies of the bill of lading. The teletype machines are programmed to start and stop a slave teletype machine on which is printed a Web-O-Label stencil for later use by the traffic department in preparing the customer address labels for the goods shipped. In effect then, the flexotypist at the remote office when striking the key, is creating the bill of lading and address labels used at Bethune 900 miles away without the plant having to resort to retyping.

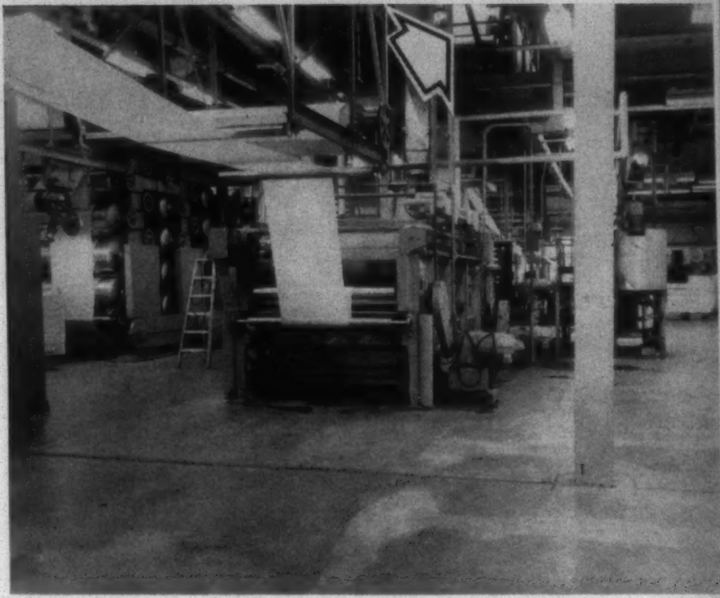
Distribution of the five-part shipping order copies is (1) one copy is held as a tickler copy by the planning department; (2) one copy is released to the traffic department for stock selection and shipping; (3) another serves as the packing list with the goods shipped; (4) after shipment a copy showing exact quantities, carrier and ship date is mailed to the originating branch sales office; and (5) the final copy with the original bill of lading is mailed to the customer. The shipping order bill of lading is retained by the carrier and the memo B/L retained in the plant files. For those orders which require individual roll or case numbers and corresponding yardage, a detailed packing list is prepared which also serves as a location guide in picking the selected stock. A copy of this detailed packing list goes with the shipment and a duplicate is mailed to the customer.

Bill Within 24 Hours

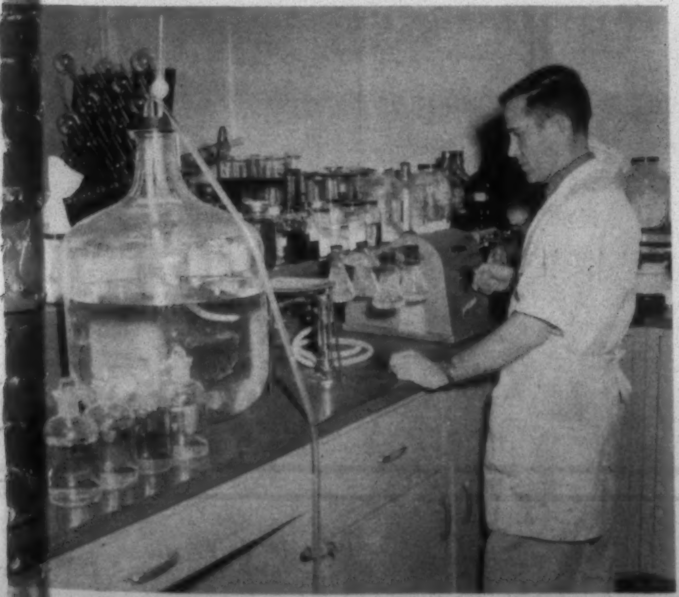
Company rules require the customer be billed within 24 hours after shipment. At present billing is done from the company's home office at Walpole. Later this will be handled by the Charlotte office. All shipments made the previous day at Bethune are reported that morning by teletype message to the billing office. By use of IBM cards created from the original customer tape at the time the shipping order is prepared, the invoices are prepared by IBM equipment, and are mailed to the customer that same day.

Production Orders

As in the case of customer pre-punched tapes for shipping orders where constant information is stored for repetitive rapid use, so does the plant maintain a file of pre-punched tapes containing complete specifications, process routing and customer quality requirements for every style of cloth and finish ever produced, now numbering over 3,000 different items. The largest part of the plant's work falls into the categories of consumer products and industrial products. In the area of industrial products, the sales department controls the plant's inventory by instructing what processing the plant should do. When a processing order is received, the availability of the greige cloth is checked and assigned. The appropriate product tape is selected and the variable information—such as the available date, the yards ordered, the promised delivery date and the processing lot number—is added. The prepared tape is then fed into a flexowriter and the information is printed on a seven-part production order lot form. Within the set are copies for immediate distribution to the production scheduler, the superintendent of each processing center through which the cloth will pass, the laboratory and the sales department. The first copy of the set is a multilith mat from which is printed the many work order copies needed throughout the various processing operations in the plant plus the required cloth identification style labels to be affixed to the cloth at final finished put up. The use of a multilith machine adds flexibility in that only those work papers needed regardless of their size or quanity may be printed.



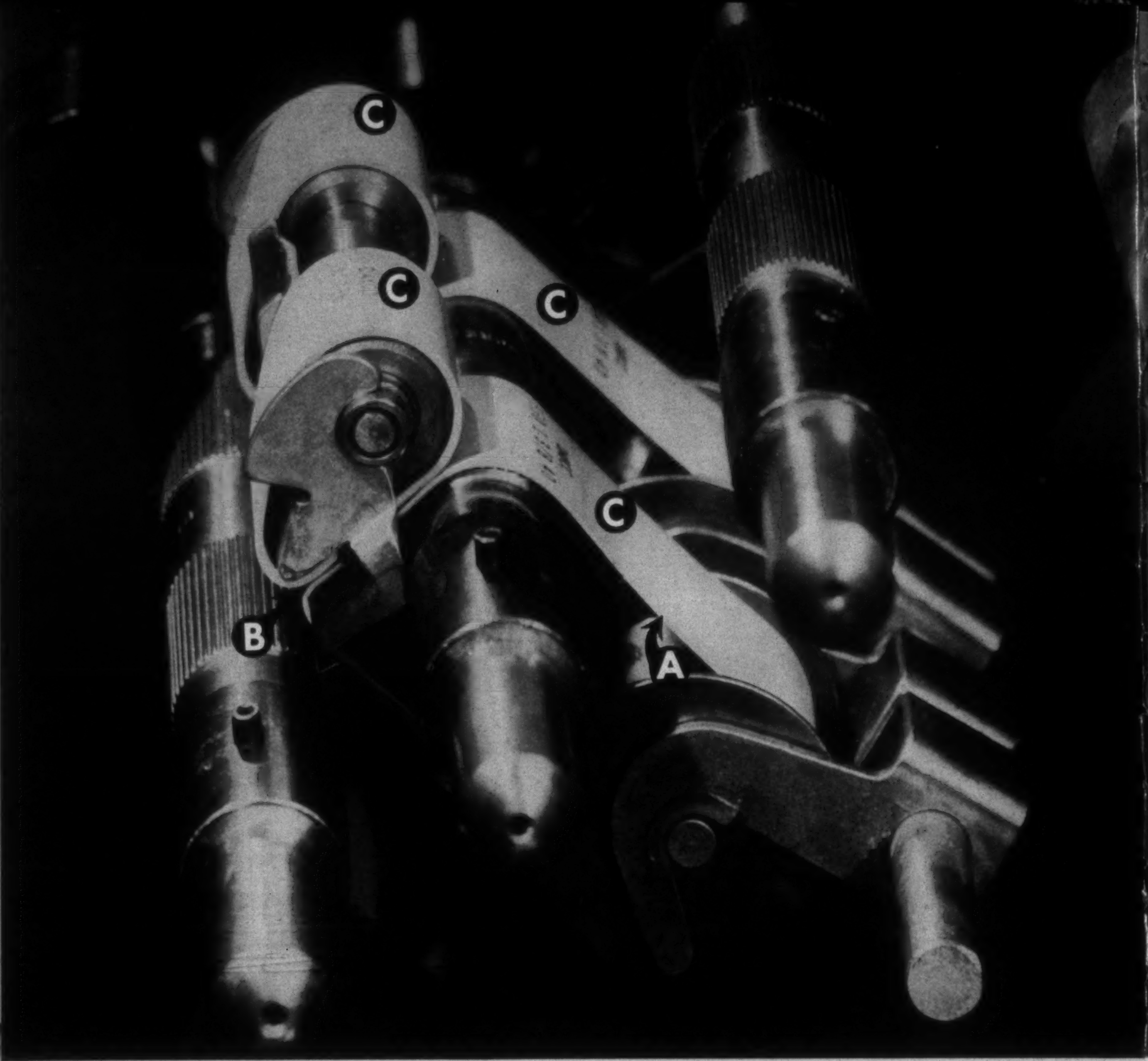
Bethune's continuous dyeing range is designed for flexibility. The first part of the range can be used separately for commercial and pigment dyeing while the latter part is used for dyeing and/or open width soaping. Goods are dried on cans *(arrow)* after padding before further processing.



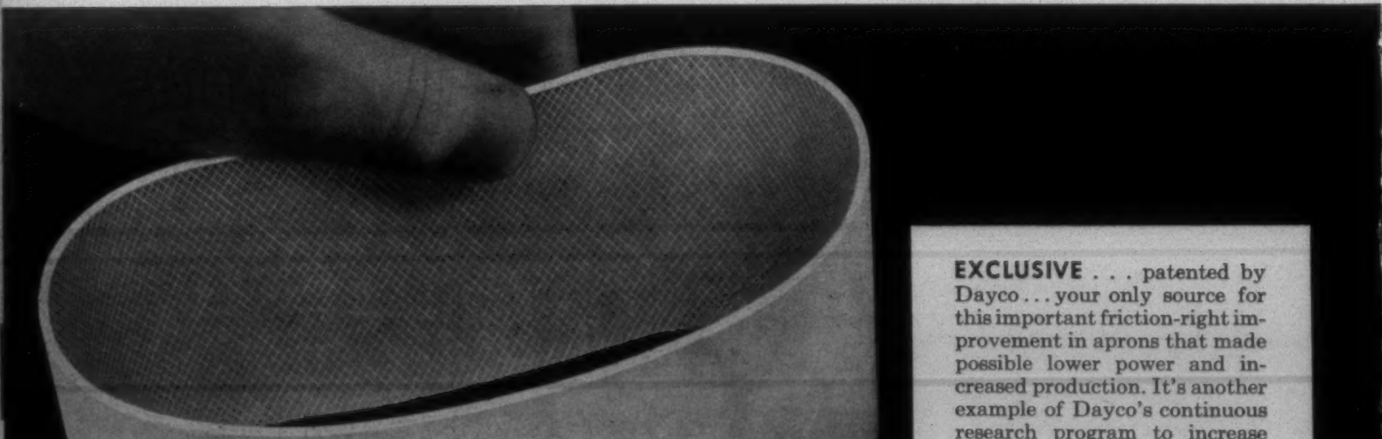
Bethune's finishing laboratory concerns itself with new product and new process development as well as plant process quality control. Equipped with miniature padders, coaters, drying ovens, abrasion testers, colloid mills, extractors, a muffle furnace for determining the inorganic content of fabrics, and other types of chemical testing devices, the laboratory has a full-time staff of six. Other equipment includes tensile strength testers, stiffness gages, tear testers and various physical testing devices.

Advantages Of System

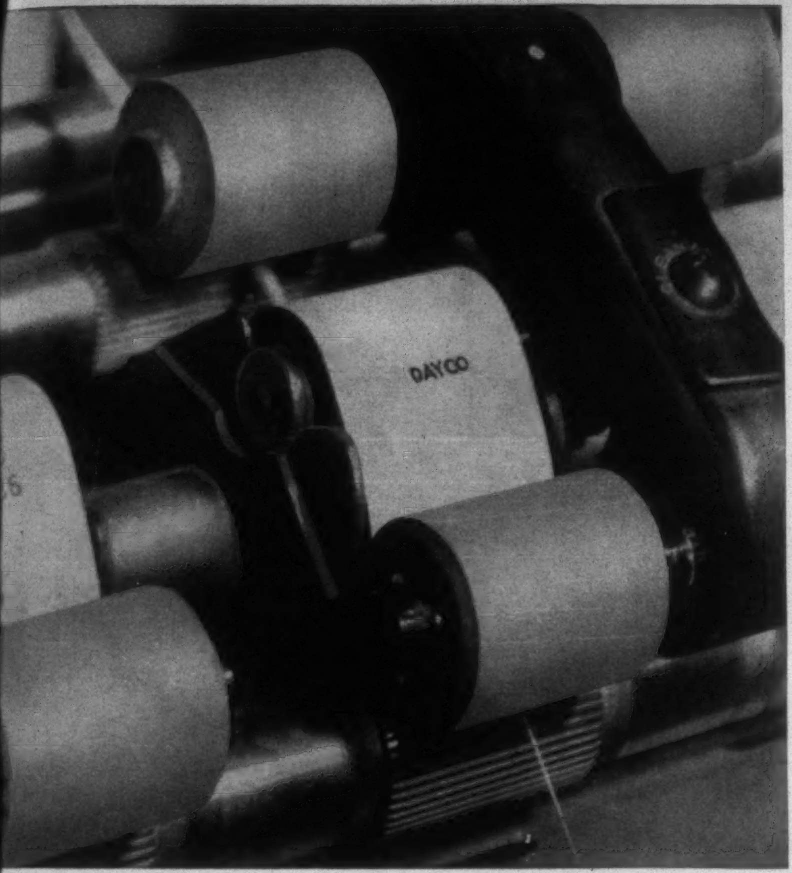
By maintaining five channel pre-punched tapes to store constant customer information or cloth processing information, and after the simple operation of punching in the variable information using these tapes to activate teletype machines and flexowriters to create the shipping orders and plant production orders, countless typing operations and the accompanying possibilities of errors are eliminated while saving countless manhours of clerical time. These systems, worked out with the aid of Standard Register Co. and Western Union, permit the paper work to keep pace with fast moving plant operations.



ACTUAL WORKING MODEL of long-apron system shows: (A) Patented embossed surface for precise coefficient of friction and abrasion-resistance formulated to last for years: (B) Unmatched flexibility at nose-bar for consistently smoother performance and top quality yarn: (C) Guaranteed yarn control due to a cleaner spinning outside surface.



EXCLUSIVE . . . patented by Dayco . . . your only source for this important friction-right improvement in aprons that made possible lower power and increased production. It's another example of Dayco's continuous research program to increase economies and production.



A COT FOR EVERY PURPOSE—as well as a virtually all-purpose cot! That's the great Dayco story to meet every need for surface texture, densities, dimensions, sizes, kinds. Whether man-made fibers or mixtures are your spinning problem, Dayco research in the laboratory and in the field guarantees consistently better results and greater savings.

NEW RECORD-BREAKING SPIN-AND-WEAR PERFORMANCE

with Dayco on any apron system

For super-quality yarn—consistently, month after month—nothing matches Dayco's patented Embossed Apron for long-apron systems. Here's super-smooth drafting action—unequalled flexibility and precision friction surfaces on both sides to meet any and all conditions.

No more tucking or jamming at the nose-bar . . . no more ozone breakdown . . . no more abrasive problems for months and months.

Improve your yarn quality . . . up your spinning performance with the pioneer and leader in the field —Dayco!

Ask your Dayco Representative to set up a time trial installation with Dayco Aprons and Cots . . . better results guaranteed. Phone or write the Dayton Rubber Co., Textile Division, 401 South Carolina National Bank Building, Greenville, South Carolina.

Dayton Rubber

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Dayco and Thorobred Textile Products for Better Spinning and Weaving

OVERSEAS PLANT: THE DAYTON RUBBER COMPANY, LTD., DUNDEE, SCOTLAND

Dayco All-Purpose Cots exceed 300,000 spindle-years WITHOUT REBUFFING

300,000 spindle years without the need of the usual periodic buffing! That's the 2½ year record from just one 120,000 spindle plant using Dayco's ALL-PURPOSE SG-60 cots.

Add to this amazing wear record the great volume of high-quality yarn coming off the production line and you can see the outstanding efficiency of the versatile SG-60.

But with more than 70 different fibre combinations running now on production lines, a wide variety of top-quality cots must be used. Now, in plant after plant, Dayco has proved its laboratory tests on its full range of cots in actual production. Dayco offers a cot for every purpose. Each one is specifically designed for outstanding performance in a specific production situation with just the precise coefficient of friction. Dayco Cots deliver more yarn... better-quality yarn in mills everywhere, year in and year out.

This is just another example of Dayco service in the cot and apron field. Dayco's broad, continuous research and laboratory facilities have brought the most practical answers to the textile industry's spinning problems. Dayco's discoveries in precision compounding have resulted in closer precision tolerances than any other on the market.

Dayco research sought and came up with the answers on super-drafting at lower horse-power. Dayco's laboratory maintains quality controls on Dayco's own production line that have no match in its field.

The Loomfixer And His Job

Part Sixteen

HOW TO KEEP THE HARNESS LIFTING MECHANISM IN GOOD OPERATING CONDITION

By WILMER WESTBROOK

A smooth-operating, correctly-timed harness motion can do much to keep a loom producing at peak efficiency. But the following harness-motion faults can be seen in almost any weaving mill:

(1) Sheaves and sheave shafts badly worn.

(2) Sheaves in need of lubricant or sheaves that are over-lubricated.

(3) Compensating sheaves set wrong.

(4) Sheaves spaced wrong.

(5) Springs too tight or too slack.

(6) Hooks in the wrong eyes.

(7) Harnesses too close to the lay.

(8) Heddle eyes too tight on the frame.

(9) Broken heddle eyes.

(10) Heddle spacers set wrong.

(11) Unmatched jack sticks.

(12) Treadles sticking.

(13) Treadle rolls worn out.

(14) Worn harness cams.

When a new warp is tied in the loom the loomfixer should not leave the loom until the harness motion is in good operating condition. He should check it periodically for faults. The weaver should have broken heddle eyes replaced as soon as they break and should flag the loom for any faults that develop in the harness motion.

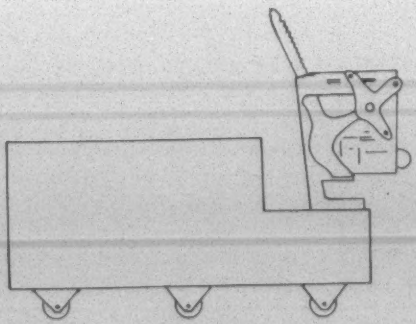
If the loom is equipped with dobbies the entire head should be disassembled, cleaned, worn parts replaced, reassembled and timed at least twice a year.

One of the best ways to keep dobbies in good condition is to have an extra head mounted on a truck. This truck can be pushed to any part of the mill and the extra head exchanged for one on a loom in just a few minutes.

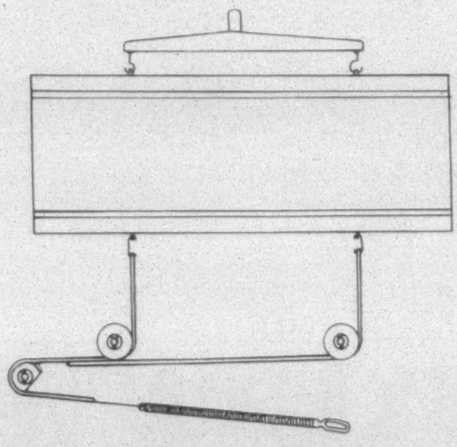
The head from the loom is bolted to the rack and pushed to a convenient place for overhauling. As each part is taken off it is closely inspected and, if usable, it is dropped into a tub or vat containing a strong solvent such as trisodium phosphate. After the frame has been thoroughly cleaned the parts are removed from the solvent, wiped dry and assembled in the frame.

The entire head can be reassembled on the rack, all settings checked, parts lubricated, then moved to the next loom for exchange and the process repeated.

This method of overhauling keeps loom downtime to a minimum, does not have the weave aisle obstructed while the overhauling is being done and the head is placed in a more convenient position for the operation.



Dobby can be mounted on this truck for overhaul and transfer. Parts are kept in box part of the truck.

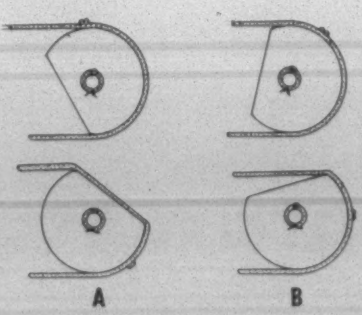


Harness motion with Dwight spring top. Regardless of the type top used, rigging should be kept in a straight line.

Harness motions equipped with spring tops should also be overhauled at least twice a year. This work must be performed at the loom but it takes only a short while to completely rework a spring top.

Place a cloth or waterproof paper over the harnesses, warp and cloth on the loom to protect them from falling dirt, lint and lubricant. Release the springs and remove the sheaves from the shafts.

A good method here also is to have sheaves for ex-



Wrong way to set compensating sheave (a) and right way (b).

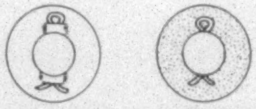
change that have been inspected and cleaned. Wood sheaves will last longer and will give better service if they are soaked in oil before use.

Unless a sheave is warped or broken, it can usually be made good as new by inserting a new bushing in it. Press the bushing in or lay a piece of soft wood across it and strike the wood with a hammer. Hammering the bushing itself will damage it.

Sheave bushings are usually made of wood, bronze or of oil impregnated powdered metal. Bushings should be immersed in light oil for a day or two before use. Remove any burrs from the bore of the bushing with a round file and smooth with emery or crocus cloth.

If the sheave shaft is not badly worn it can be turned a half-revolution and will be good as new. However, if the shaft is worn enough to let the sheave slant from a vertical line it should be replaced.

Spacing washers should be placed between the sheaves and a washer on the outside of the front sheave. This outside washer should have slots for the cotter pin, otherwise the washer will stick to the sheave and, turning with it, will soon cut the pin.



Special washer *(left)* or leather washer *(right)* should be used on the sheave shaft to prevent cutting of the cotter pin.

If the special slotted washer is not available a leather washer placed between the cotter pin and the metal washer will protect the pin from wear.

The harness springs should have just enough tension to lift the harness smoothly and efficiently. Too much tension causes strain and wear to all parts of the harness motion and is a drag on the loom and motor. Excessive spring tension can actually slow the loom and cause the motor to overheat.

Strapping should be hooked correctly and pull in a straight line. Straps should be attached to compensating sheaves to give the maximum lift with a minimum of effort. Hook eyes, in both the top and bottom slats of the harness should be spaced correctly. If an eye has broken off in the wood and cannot be removed or the hole has become too large to hold the screw a new slat should be put in.

All the harnesses should swing freely and move up and down without sidesway and without chafing. See that the heddles swing free and that the spacers do not bind.

Check the treadles, treadle rolls, cams and jack sticks at every warp out on looms equipped with undercam motions. Rebush the treadles when needed and keep good rolls in them. Many loom fires are caused by worn out or sticking treadle rolls.

Oily lint will accumulate around the treadle rolls and some loomfixers do not remove it. They claim that the oil-soaked lint keeps the rolls coated with a film of lubricant. But the oily lint is highly inflammable and any good it may do is more than offset by the hazard it presents when a spark or overheated roll ignites it.

It requires only a fraction of the loomfixer's time to keep the harness motions in good condition but the time and effort expended on this vital loom motion is well-spent.

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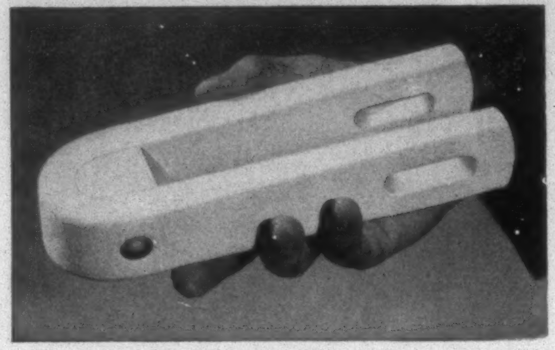

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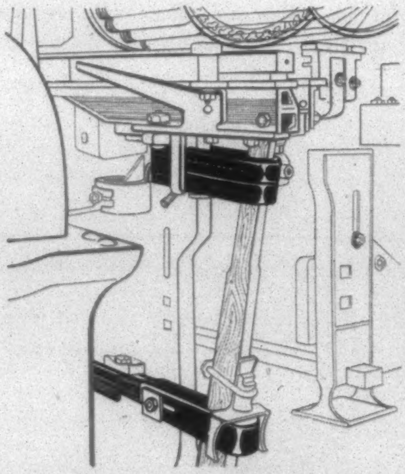

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The Designing Of Pile Fabrics

HIGH-PILE "TOY-FUR" FABRICS CREATE SPECIAL WEAVING PROBLEMS

Chapter 4

By E. B. BERRY*

THE Callaway Textile Dictionary defines plush as follows: "A warp pile fabric covered with a plain surface of cut pile. The pile is longer than velvet pile and it is less densely woven. The pile may be formed by means of cutting wires or, more commonly, the cloth is woven as a double plush and severed on the loom. The ground is usually of cotton and the pile of mohair, rayon, wool, cotton, etc."

Fig. 22 illustrates the weave, drawing-in draft and cross section of a plush fabric. This is known as the toy fur weave because it is employed to make fabrics that are used to cover such children's toys as teddy bears, bunnies, etc. When a better pile anchorage is required than is found in the 2-pick velour weave, the 6-pick W tuft is used. In this case, there is a pile tuft every three picks, which means that anchorage is obtained at the sacrifice of coverage. In order to obtain the same coverage as in velour, the toy fur weave will require more picks per inch, or a higher pile height, or a combination of both.

In very high pile fabrics (½" or greater), filament yarn is generally used. If spun yarns were used as pile in such a high pile fabric, the loss in weight of pile yarn would be great, due to short fibers being removed in finishing, after the fabrics were cut apart at the loom.

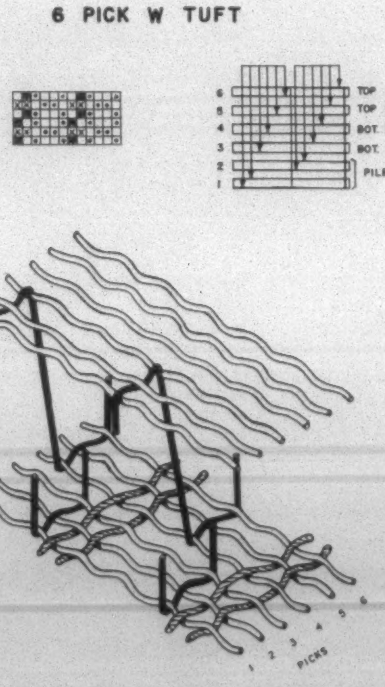

Fig. 22—This is the weave, drawing-in draft and cross section of a plush fabric known as the toy fur weave because it is widely used in covering children's toys.

Extremely high pile fabrics generally will have better anchorage than the same weave with low pile due to the yarn bending when pressure is applied from the pile surface rather than being stiff and pushing out. Even though this toy fur is a W tuft, inspection of the weave will show that there are two legs from two separate tufts coming between two adjacent picks. If the pile is short, with slippery pile yarn, and sufficient pressure is applied from the pile surface, these two legs may push to the back of the fabric. Because there is a W tuft the entire tuft will not be pushed out as in the case of a V tuft, but a ragged appearance will result.

The pile, bottom backing and top backing harness are in the same relative positions to each other as in the velour weave, and for the same reasons.

The two pile ends weave next to each other in the same dent. As the yarns come out of the reed, they expand to fill up the space occupied by the reed wire. The ground ends push the pile. From the cross sectional view it can be seen that one backing end will push both pile tufts. This is the reason for having the backing weave a 2-1 rib. If the reed wire separated two adjacent pile ends, one pile end would roll with its adjacent backing end, when expansion took place from the reed to the cloth.

Delivery Calculations

Fig. 23 shows the cross section of a toy fur weave. From an actual analysis of a fabric, a tuft measured .90" in the finished cloth, with 40 picks per inch. There is a pile tuft every 3 picks so the finished delivery is:

$$\left\{\frac{.90''}{3}\right\} \times 40 = 12.00$$

yards delivery. This is high compared with the velour but the pile is much higher.

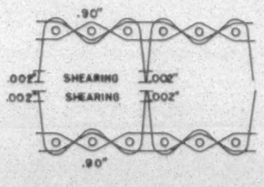

Fig. 23—In shearing this toy fur weave fabric, it may be wise to add .002 inches to allow for the loss in shearing.

Shearing instructions for this fabric may be just "skim-off." It may be wise to add .002" to allow for the loss in shearing. The tuft then from the loom would be .904" (.90" + .002" + .002"). A one-pick shrinkage from the loom to finished cloth is assumed. The greige delivery then will be:

$$\left\{\frac{.904''}{3}\right\} \times 39 = 11.752 \text{ yards delivery}$$

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*Mr. Berry is an assistant professor in the department of fabric development at North Carolina State College School of Textiles.

Finishing

Listed below is a typical erect high pile rayon flow chart.

(1) Weave

(2) Measure

(3) Greige Inspect

(4) Mend and Burl—Because of the height of pile in this fabric, small defects may be covered up, and special mending instructions may be issued, reversing the more rigid mending requirements of a fabric like a velvet or velour.

(5) Greige Storage

(6) Greige Shear—The pile is sheared to remove some unevenness and choppy cutting from the loom. Because of the height of pile, the instructions would be "skim off" with no specified pile height.

(7) Scour—Continuous 7 or 8 bowl. First 3 bowls scouring solution, last 4 or 5 rinsing (plain water) to remove dirt, trash and any oil that may be in the yarn. Also to make sure all the pile has the same lay. Sometimes this operation is replaced by "wetting out" in the dye kettle.

(8) Dye—Use almost any cotton dyestuff. The viscose rayon pile, having a greater affinity for the dyestuff than cotton, will dye darker than the backing. Generally dyed open width in a kettle, about 125 yards/set, due to the high pile and heavy weight of the fabric.

(9) Finish—Wet-out and extract; dry; beater; shear; brush.

(10) Condition or Humidify

(11) Finish Inspect

(12) Color match

(13) Wrap—Due to the high pile, and the fact that the rayon is easily crushed, rolling on a tube is not satisfactory. Steel frames are used, with hooks on the outside, and the selvage of the cloth is hooked onto the frame. This supports the piece of cloth, and one layer will not rub or crush another layer. The entire frame is then placed in a cardboard case, and secured with tape. Each piece is only 35 to 40 yards long as this is a bulky fabric.

(14) Ship—Cases of finished cloth are put in bins, or stored on the floor, and held until enough cases are ready for shipping to the customers.

End Uses

Erect high pile rayon is used for (a) toy fur—to cover teddy bears, horses, and all types of children's toys; and (b) trimming on ladies' coats, where wear is not great.

This type of fabric with a lower pile height may be printed to give the appearance of a leopard skin, tiger skin, etc. It is generally done on a roller printing machine.

(1) Discharge Print—The discharge paste is applied by a printing roller. The paste, where it touches the cloth, will change the color and give a new color to the spots that are treated, the untreated spots remaining the same color as before.

(2) Steam—This helps the chemical action of the discharge paste, in changing the base color.

(3) Finish—Wet-out and extract; dry; and shear. The wet-out operation will help remove the discharge paste. This operation is sometimes replaced by a scouring operation. The shearing will even up the surface, and make it look clean and smooth.

(4) Condition or Humidify

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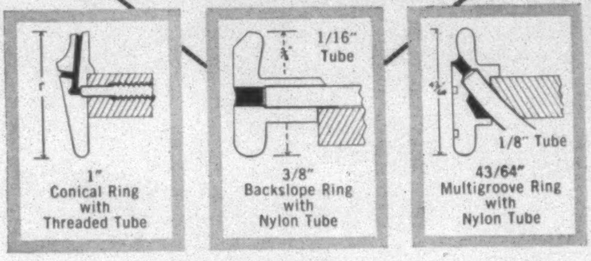

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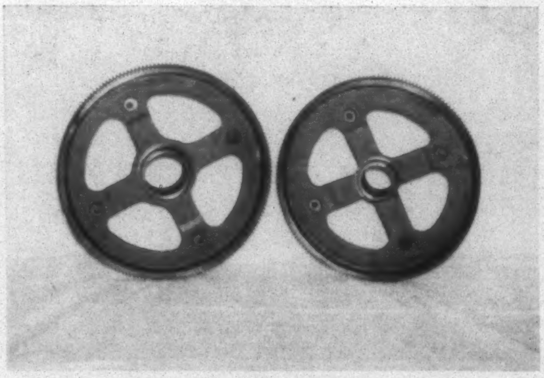

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(5) Finish Inspect

(6) Color Match

(7) Wrap—If the fabric is very dense, with a high pile, a steel frame is used. If the fabric is light in weight and low pile, a roll may be satisfactory. The cloth, full width, is rolled on a cardboard tube, covered with Kraft paper, burlap or other wrappings.

(8) Ship—Rolls or cases of finished cloth are put in bins, according to style number, and held till enough yardage is ready for shipping to the customer.

End Uses

Printed rayon pile is used for: (a) toy fur; (b) trimming on women's coats; and (c) lap robes.

These fabrics may also be crushed and a typical flow chart is as follows. Fabrics are seldom woven and dyed for the express purpose of giving a crushed finish. Rather it is a means of converting a piece of erect pile with a grade of No. 2 or No. 3 into a No. 1 grade with a crushed finish. Obviously, major defects, such as holes in the cloth, ripped cloth or short lengths, cannot be converted into No. 1 cloth, but minor defects such as choppy shearing, single pile ends out and slightly low pile height, can be made into No. 1 cloth, if it is crushed.

(1) Inspect—The roll of cloth is taken from finished storage, and inspected to determine if it can be made into a No. 1 grade crushed finish.

(2) Crush—The cloth, pile up, is placed on a table which has lengthwise grooves or troughs, and the material is pressed into the grooves. At the delivery end of the table are wooden rolls, with rubber feet attached. The feet fit into the lengthwise grooves, and give the cloth its crushed effect by ruffling up the pile. Two aprons of light weight duck (one above the crushed cloth and the other below) are fed at the same rate as the rayon pile fabric in such a manner that they look like a rayon pile sandwich. As the crushing is done, the three fabrics are rolled, under tension, on a perforated mandrel. About a three-yard leader of duck is put on the mandrel before the sandwich is started, and about three more yards of duck are wrapped around the roll, after the sandwich is on the mandrel.

(3) Steam—The mandrel, with the cloth sandwich on it, is taken to a live steam line, and under pressure, steam is forced through the cloth. This is really giving the cloth a "permanent wave," as the high temperatures set the pile in its crushed position. About a half-hour is required for this to do a permanent job. After steaming, the cloth is unrolled, out of its sandwich, and put through a tenter dryer. This is necessary to stretch the cloth to its 54" finished width, and also to dry the cloth.

(4) Finish Inspect—Graded for quality as to damages, width, finish, length of piece and a "finish grade" is given to the entire piece. If the crushing is not approved, it must be "recrushed." Color is not too important, due to the different amounts of light reflection from the crushed pile.

(5) Roll and Wrap—The cloth is rolled on a paper tube, full width, with about 35 yards per roll, usually in one continuous length. Because the pile is already crushed, there is little danger of damage due to rolling this high pile fabric. The wrapping is in Kraft paper with burlap covering but other wrapping may be used.

(6) Ship—Rolls of finished cloth are put in bins, and held till enough rolls are ready for shipping to the cus-

tomer. Because of the special nature of the fabric, the orders are generally small, and these pieces will be shipped out quickly.

End Uses

Crushed rayon pile is used for (a) toy fur; (b) trimmings on women's coats; (c) lap robes; (d) novelty draperies; and (e) novelty furniture upholstery, where wear is not too great.

Most of the 6-pick W tuft fabrics that go into the toy fur trade are sold primarily on the basis of price. Children will destroy the toys and therefore the manufacturers cannot put too much money into the fabric. Some very elaborate toys are made, however, for the carriage trade, consisting of toy lions, leopards, ponies, etc., which are 3 feet high and sell for several hundred dollars each. In such a toy lion, the hairs on its mane would be three inches long. This could be made from a woven fabric.

Obtaining such a high pile presents a problem in weaving. If three inches are needed in each piece, the spread between the top and bottom fabrics at the loom is six inches. The lift of the pile harness is not unlimited. Also, as the top shed is raised, the top shuttle box must also be raised, for the top box must always be in direct line with the top shed. If this were not true, the top shuttle coming out of the top box would never enter the top shed. This movement of the top box is limited generally to about three inches.

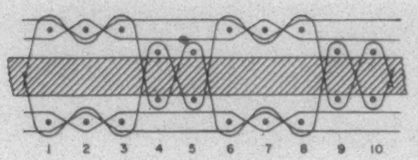

Fig. 24—One way of weaving pile fabric is through the use of a stationary pile gauge wire. Pile height can be controlled by the size of the pile gauge wire, different heights requiring different wires.

One way to weave a fabric with a pile height of three inches is simple. Have the spread between both fabrics set at three inches and cut the two fabrics apart, not in the center, but at the base of one of them. This gives one fabric with a pile height of three inches, but leaves the remaining fabric with no pile on it. Such a fabric is wasted, and the price of the fabric with the three-inch pile height must absorb the cost of the waste fabric. Even in this carriage trade, it is doubtful if such a fabric would sell due to the high price.

Another way of weaving is in the use of a stationary pile gauge wire. Fig. 24 illustrates a cross section of such a weave. The first three picks made the conventional three picks of the W tuft. On the fourth pick the pile end goes to the opposite side of the pile wire, but neither the pick nor pile end weave in the mate piece. On the fifth pick, the pile yarn reverses again to this original side of the wire and neither the pick nor pile end weave in the fabric. The sixth pick returns to normal again and continues to make a W tuft. The ninth and tenth picks are similar to the fourth and fifth picks. With this principle, a much higher pile is

(Continued On Page 74)

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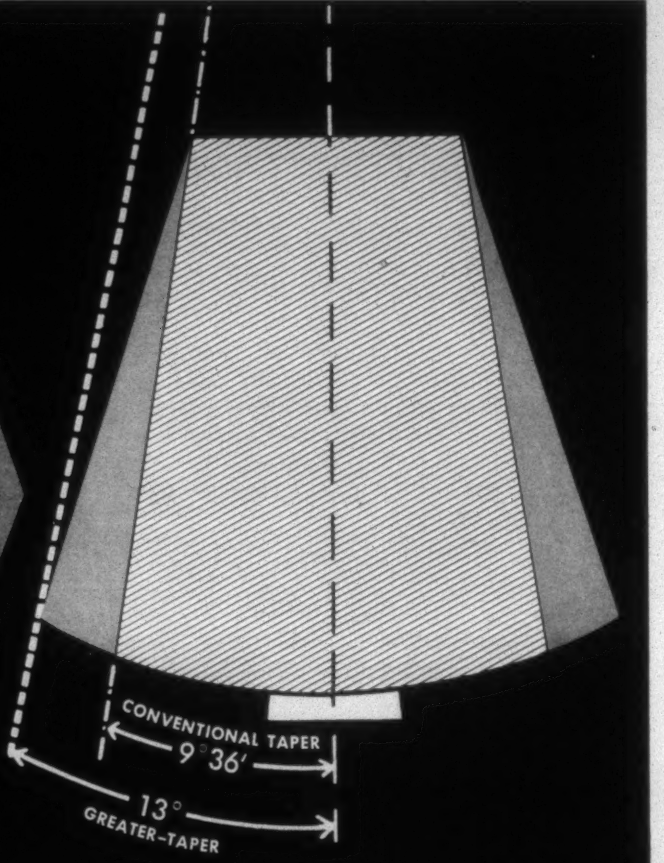

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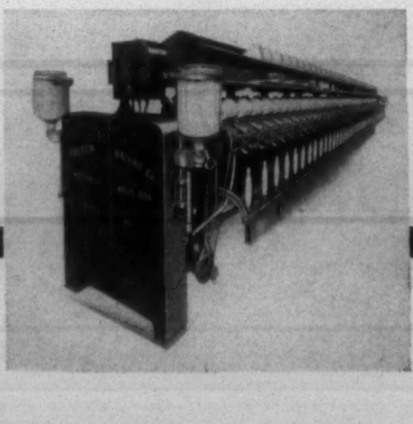
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Centralized Lubrication Proves Its Worth In More And More Mill Applications

ARE you guilty of sabotaging your own plant by failing to provide adequate lubrication for your machinery? Does your company consider lubricant application as a distinct *operating function?* Or is this activity classed with general maintenance such as painting the walls and replacing fluorescent tubes? As an operating function, lubricant application becomes as important as picking the shuttle across the lay.

Lubrication application is a tricky business since it consists of amounts, kinds, places and time intervals. Adequate lubrication means getting the right *amount* of the right *kind* of lubricant to the right *place* on the machine at the right *time*. The effects of lubricating machinery either correctly or incorrectly are far reaching.

Not providing the right kind of lubricant leads to bearing failures, increased power consumption, spoilage of product, loss of production efficiency, etc.

Not getting the lubricant in the right place on the machine can ruin fabric or yarn, increase fire hazards, be a safety hazard, etc.

Not getting the right amount of lubricant on the bearing surfaces can cause many of the same evils and create dangerous working conditions. Improper amounts of lubricant can also increase maintenance costs due to excessive down-time and repair parts bills.

Applying the right amount of lubricant at the wrong time causes either waste of money paid for the lubricant or unnecessary wear on the bearing.

Operating Function

As an operating function on automatic, high-speed machinery, lubricant application deserves the benefits of automatic operation. Lubricant application should be freed of the "human error" so often associated with premature machine breakdown or failure. Current marketing demands and labor costs call for greater speeds all along the production line. Greater speeds generally mean higher heat generated by increased friction of moving parts. For instance, bigger shuttles must be picked faster across wider lays. Indeed, the latest looms are shuttleless with faster means provided for laying a pick of filling from a larger package in the shed.

Centralized lubrication systems minimize or eliminate all manual lubrication frailties by making lubricant application an operating function of the machine. Automatic centralized lubrication systems do an even better job. Confirmation of this important fact is seen from the installation of such systems on much of the new equipment manufactured by Draper, Saco-Lowell, Whitin, Davis & Furber and many other textile machinery manufacturers.

An Absolute Requirement

While high speed machinery absolutely requires better controlled, more efficient lubrication than previous models, it is important to note that better lubrication nearly always means more profitable operation for almost any type equipment, regardless of age. This is true because of fewer bearing failures, reduced power consumption, reduced lubricant cost, reduced labor cost, use of uncontaminated lubricants, and increased lubricant efficiency.

How large does the plant have to be—or how large does the lubrication system have to be—to get these benefits? Savings are made by the smallest installations involving the fewest lubricant points. In fact, savings, percentage-wise, realized by smaller plants are frequently greater than those recorded by the larger ones.

Central system installations in smaller plants may not lead to extensive direct oiler labor savings but many other more important benefits are available. Large system installations do result in labor savings although these are by no means the most important advantages.

Preventive maintenance routines such as elaborate record keeping, detailed lubrication instructions and check procedures are, unquestionably, helpful. However, individual contact methods of lubricant application cannot fully get the job done under complex modern conditions. The oil can and grease paddle are horse-and-buggy methods any way you look at them.

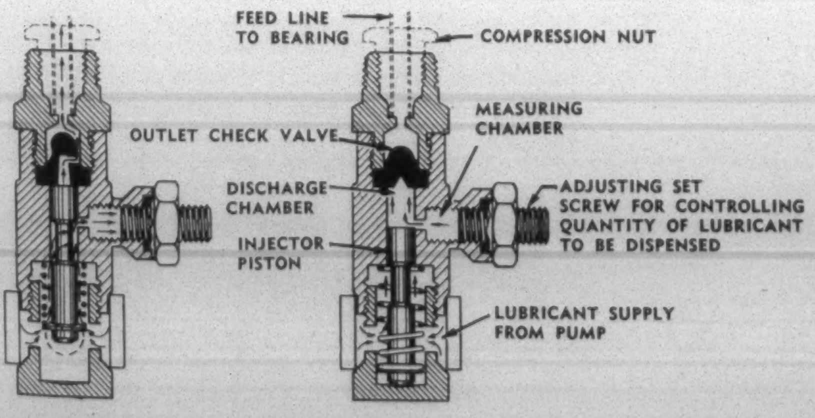

Fig. 1

In Lincoln's type SL-5 Micro-Measure injector, lubricant under pressure from the supply line moves the injector piston into the discharge chamber to force the precharge of lubricant already in the discharge chamber through the outlet check valve to the feed line. As the injector piston is spring-returned to its normal position, lubricant is trapped in the measuring chamber until the injector piston clears the connecting port between the measuring and discharge chamber. This action permits the lubricant to automatically transfer into the discharge chamber.

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Automatic and non-antomatic centralized lubricating systems are used on pickers; garnetts; cards; drawing; roving; cotton, woolen and synthetic spinning frames (on both rings and bearings); looms (both shuttle and shuttleless); and finishing ranges. In fact, practically any machine which requires lubrication can have an automatic centralized system adapted to it.

Central lubricating systems can be fully automatic, semi-automatic or manual depending on whether they are time-clock controlled, mechanically controlled or manually operated. The three systems operate on the same principal, basically, and consist of a pumping unit, supply and feeder lines and a single circuit of measuring valves or injectors. Lubricant may be delivered from the original refinery container or from a reserve in the pump itself.

The Lincoln Engineering Co. system uses injector valves which receive lubricant from the pump through supply lines and apply it to bearing surfaces through feeder lines. The Lincoln injectors are small, highly accurate measuring valves that are adjustable to deliver just the right quantity of lubricant to each bearing. The Lincoln Type SL-5 Micro-Measure injector is illustrated in Fig. 1.

When lubricant is pumped to the injector, the hydraulic pressure forces a measured amount of lubricant from the injector to the bearing. Lubricant from the *supply line* moves the *injector piston* into the discharge chamber to force the pre-charge of lubricant already in the discharge chamber through the *outlet check valve* to the *feed line*. As the injector piston is spring returned to its normal position, lubricant is trapped in the measuring chamber until the injector piston clears the connecting port between the measuring and discharge chambers. This action permits the lubricant to automatically transfer into the discharge chamber. Lubricant flow from the feed line is blocked by the closed outlet check valve. The amount of lubricant delivered to the bearing surface is adjusted accurately by turning the set screw in the measuring chamber. The miniaturized injector is only slightly over 1½ inches in over-all length.

Feeder lines to fixed bearing surfaces are generally made of either ⅛-inch or ¼-inch outside diameter steel or nylon tubing. Feeder lines to moving bearings are flexible. Supply lines vary in size up to ¾-inch in diameter.

Shuttleless Loom Installation

High operating speeds and certain unique motions found in Draper's shuttleless loom require the use of automatic centralized lubricating systems. The Maxbo non-shuttle loom, built in the U. S. by Southeastern Loom & Machine Works, and sold by Edda International Corp., also depends on centralized lubrication systems to obtain much higher than conventional speeds. The manufacturers report the Maxbo is capable of running 325 to 400 p.p.m. on 40-inch goods.

One of the lubrication systems used with the Draper shuttleless loom is made by Lincoln. Generally speaking a central pumping unit supplies 50 to 100 shuttleless looms each with 30 to 34 points of lubrication. Lubricant is conducted to each loom by steel tubing. The system is actuated by an electric timing device which will cycle the system at any predetermined time ranging from five minutes to eight hours. Some of the points of lubrication on the new Draper loom are: rocker shaft, cam shaft, harness cams, lay operating cams, filling carrier, oscillating carrier wheels, power transmitter and other moving parts.

Conventional Loom

Conventional loom efficiency is improved with the addition of centralized lubrication because of less down-time, less maintenance, lower power consumption, and smoother operation. Automatic centralized lubrication is applicable to all conventional looms including cam, dobby, box and jacquard. Central systems are designed to fit specific looms and weave rooms. The number of points of lubrication varies from 8 to 60, depending on individual mill needs and means.

The harness shedding motion is one of the most desirable points of lubrication on the Draper X Model looms. With the loom running it is impractical to manually lubricate the auxiliary cam shaft bearings and cams. On X Model looms with low roll take-up motions, the inside rocker shaft bearings are difficult to lubricate manually. These two motions are covered with the most fundamental 8 to 12-point automatic lubricating systems. Some mills may find it more desirable to go to a more elaborate lubrication program with the inclusion of crank shaft bearings, cam shaft bearings, all rocker shaft bearings and pick shaft bearings. These areas are covered with 20 to 24-point systems.

Consideration should be given in long range planning to 40 to 70-point loom lubrication systems covering all points requiring frequent lubrication. Savings are permitted by the reduction of lubricant inventory and handling through the use of these systems. Inventory and handling increase in importance in weave rooms with exceptionally large numbers of looms. The use of grease may be eliminated in loom lubrication because of the proper metering of the correct amount of oil at pre-set timed intervals.

Twister Application

Considerable savings in power consumption and increased production are results of the application of automatic centralized lubrication systems to twister frame rings. End breakage is said to be reduced considerably and a more even twist is also reported.

Lubricant injectors are mounted directly on the twister ring rail. They are all connected to the same supply line. Each ring has its own feeder line. Each frame is served by an air-powered pump which is actuated by an action of the frame's traverse motion. As simple as it seems, that's all there is to it.

Graphs of power consumed by twisters without centralized lubrication show widely fluctuating power curves at various stages of the build and traverse. The power curves of twisters with centralized lubrication are practically straight lines at a low point of consumption. The reason for this is the elimination of drag on the traveler by the use of a lighter lubricant. Also a lighter traveler may be used.

Cards

Centralized lubrication systems are applied to cards on main cylinder bearings, doffer bearings, flat driving worm bearings, doffer comb bearings, lickerin bearings, comb box drive pulley, and flat drive pulley. As in previously dis-

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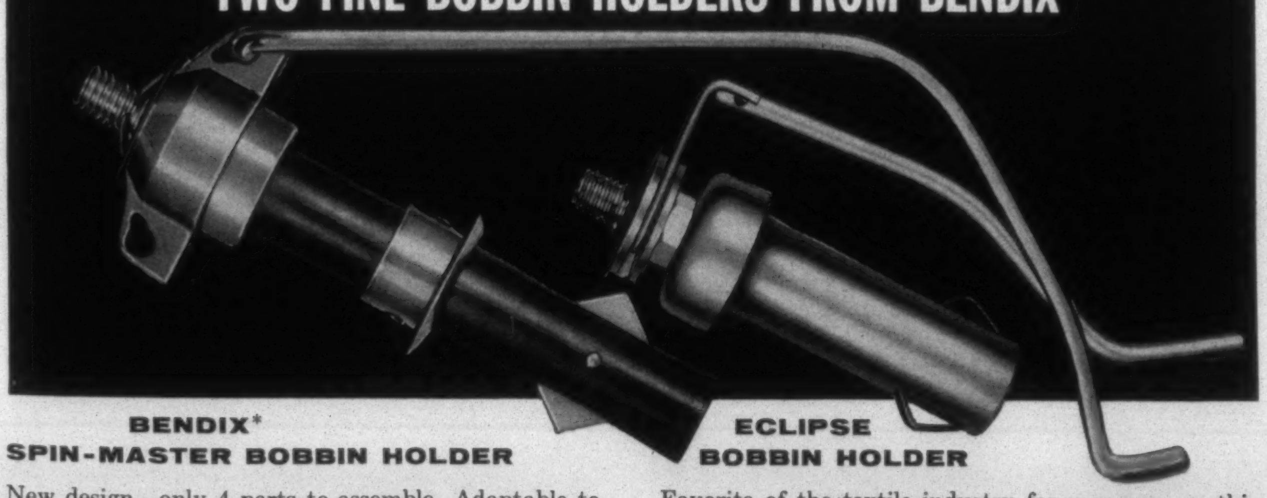

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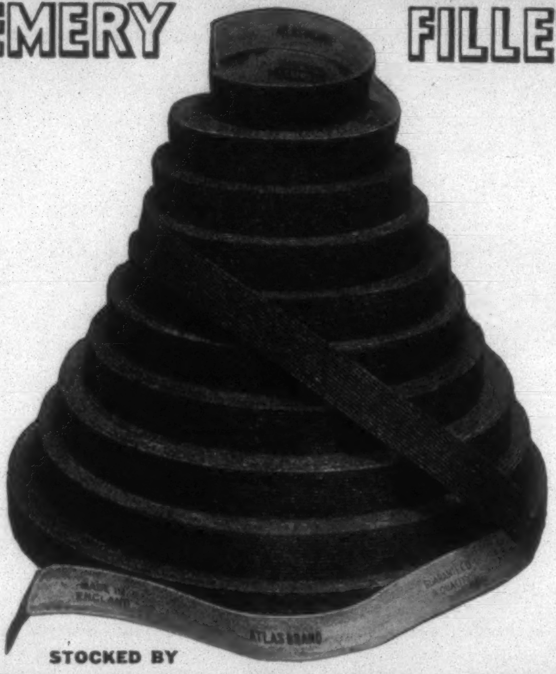

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cussed machinery, the systems make for smoother operation, reduced bearing surface wear, reduced power consumption and better quality work. A reduction in manual oiling means a reduction in labor costs but even in the largest card rooms this may not be the most important advantage of automatic lubrication. The elimination of the damaging effect of human errors in failing to find all the oil holes is probably the most important advantage of the central systems.

Automatic lubrication can be of value in every department in the mill. The extent of this value is directly proportional to the imagination of both the people who supply the equipment and those who use it.

December Cotton Consumption Up

Cotton consumption in the U. S. in December 1959 totalled 799,935 running bales as compared with 725,482 bales in November and 720,243 bales in the previous December. Daily average consumption for the month was 31,977 bales as compared with 36,274 bales in November and 28,810 bales in December 1958.

Some 9,163 bales of foreign cotton were consumed in the U. S. in December as compared with 8,258 bales in November and 7,526 bales in December 1958.

Man-made fiber staple consumption totalled 42,572,000 pounds in December. This compares with 39,034,000 pounds in November and 42,760,000 in the previous December.

Some 20,111,000 cotton spindles were in place at the end of December with 19,326,000 active. In November, 20,317,000 spindles were in place with 19,308,000 active. In December 1958, 20,681,000 were in place with 19,273,000 active.

Man-Made Fiber Production Sets Record

U. S. production of the man-made fibers in 1959 is placed at the new high level of 1,961,700,000 pounds by the *Textile Organon,* statistical bulletin of the Textile Economics Bureau Inc. Last year's production was 21% over the 1,616,200,000-pound output of 1958 and also was 11% greater than the previous record output of 1,765,600,000 pounds in 1957. All categories of fiber showed 1959 increases over 1958.

Finished Cotton Yardage Up

The yardage of cotton goods finished in the U. S. in 1959 was an estimated 6.5% more than that finished in 1958, according to Joseph E. Hoesl, secretary of the National Association of Finishers of Textile Fabrics, reporting at that group's recent annual meeting in New York City. Plain dyed cotton goods showed an increase of more than 11%.

Total cotton goods finished in 1959 amounted to 7.7 billion yards as compared to 7.2 billion in 1958. The total for plain-dyed goods was 2.6 billion yards. Bleached goods totalled 3.4 billion yards and printed goods totalled 1.7 billion.

In spite of the 6.5% gain in the number of yards of cotton material finished, 1959 was still about 5% below the peak year of 1955.

According to Hoesl, 1960 production will depend on a number of factors. Among those he mentioned were:

need for a continuing high level of business activity, elimination of surplus inventories through gearing production to consumer demand, and an effort on the part of the textile industry to persuade the administration to restrict imports of fabrics and apparel.

Woolen Fiber Consumption Down

The weekly average rate of fiber consumption on the woolen and worsted systems in December 1959 was 5% below the November rate and 9% above that of December 1958.

The weekly average raw wool consumption during December was 7,357,000 pounds (scoured basis) or approximately 1% below the November rate, and 6% above that of December 1958. Consumption of apparel class wool was 9% below the November rate and 5% above that of December 1958.

The rate of consumption of carpet wool increased 13% from the consumption during the preceding month, and was 9% above the December 1958 rate.

Consumption of fibers other than raw wool averaged 5,549,000 pounds per week, or 11% below the November average, and 12% above December 1958.

A.T.M.A. Re-Elects Childs

Child

Bolton

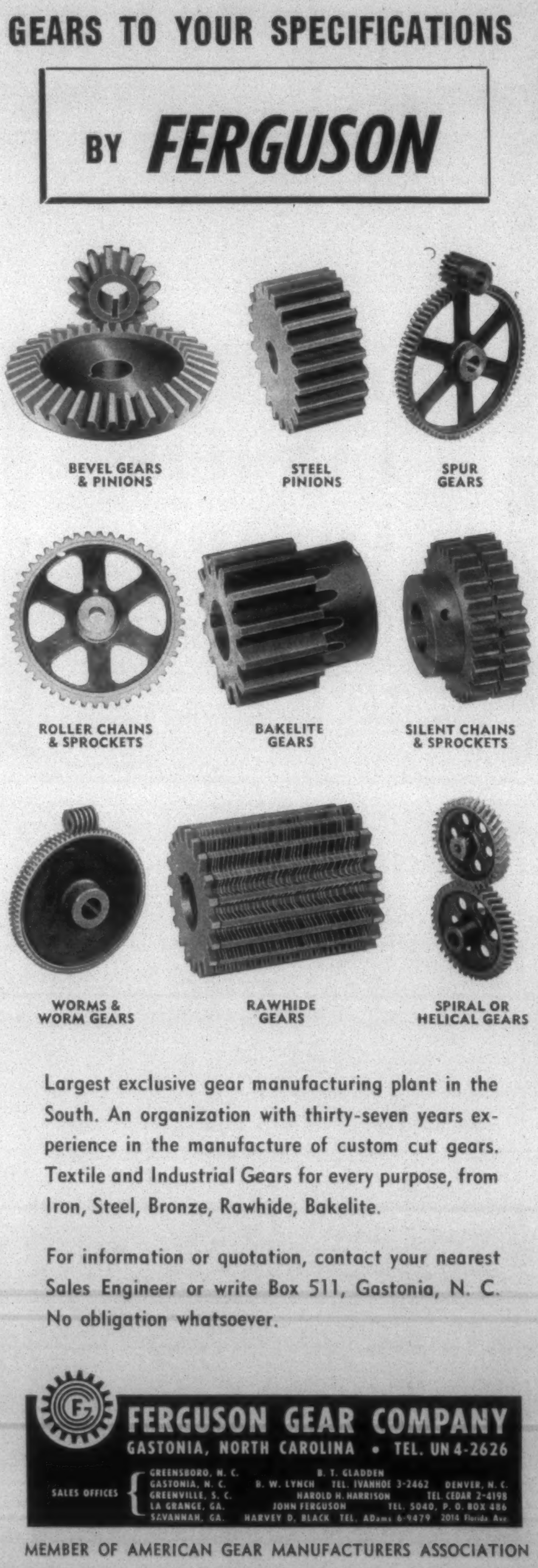
Brigham

William K. Child, vice-president of Draper Corp., Hopedale, Mass., was unanimously re-elected president of the American Textile Machinery Association at the association's 27th annual luncheon meeting held recently in Boston, Mass. J. H. Bolton Jr., vice-president of Whitin Machine Works, Whitinsville, Mass., was elected vice-president to succeed Robert Leeson, president, Leesona Corp., Providence, R. I., who remains on the board as head of Division V. F. Gorham Brigham Jr., treasurer of Saco-Lowell Shops, Boston, was re-elected treasurer of A.T.M.A. for the fourth consecutive year.

Directors at large elected for 1960 are W. K. Child; J. H. Bolton Jr.; J. E. Butterworth, president of H. W. Butterworth & Sons Co., Bethayres, Pa.; Roy G. Ross, vice-president of Barber-Colman Co., Rockford, Ill.; Thomas J. Ault, president of Saco-Lowell Shops, Boston, Mass.

Other division directors elected in addition to Leeson are J. Hugh Bolton, president of Whitin Machine Works, Division I; Thomas Stilwell, sales manager for the textile division of The Warner & Swasey Co., Cleveland, Ohio, Division IV; Frederic W. Howe Jr., president of Crompton & Knowles Corp., Worcester, Mass., Division II; James H. Hunter, president of James Hunter Machine Co., North Adams, Mass., Division IV; Thomas H. West, president of Draper Corp., Hopedale, Mass., Division VI; P. K. Schwartz, president of Proctor & Schwartz Inc., Philadelphia, Pa., Division VII.

Plans for the American Textile Machinery Exhibition in



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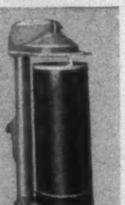

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May are being pushed forward according to a report from the exhibition committee. The committee reported that trade press response to the exhibition has been good. It is still hoped that a commemorative stamp honoring the textile industry will be granted by the Postmaster General for the month of May, coinciding with the exposition.

Quality Control Short Course

A statistical quality control short course will be offered by the School of Textiles at North Carolina State College May 2-13. The ten-day course will include the statistical approach to textile quality control as well as practical applications of these techniques to routine quality problems of the textile industry.

The course will be presented by the college's department of textile technology, headed by Professor E. B. Grover, and will be directed by Professor D. S. Hamby. Professor Hamby will be assisted by Dr. R. J. Hader of the department of experimental statistics and Professor W. C. Stucky Jr., of the School of Textiles.

Topics to be covered in the first week of the course are: Populations and Samples; Frequency Distributions; Methods of Calculation and Interpretation of Standard Deviation; Practice Problems; Calculations of Coefficient of Variation and Applications to Textile Processes; Statistical Quality Control Charts; Practice Problems and Case Studies; Applications; Quality Control Systems by Areas for Textile Plants; Interpretation and Application of Testing Data to Manufacturing Processes; Application of Quality Control Techniques with Case Studies.

In the second week the course will consider: Tests for Significance of Differences and Confidence Intervals Applied to Textiles; Continuation of the Application of Significance Testing and Confidence Intervals to Textiles with Practical Problems; Correlation and Other Relationships of Variables as Related to Textiles; Applications of Correlation to Textile Problems; Analysis of Variance; Case Studies in the Use of Analysis of Variance; Sampling Theory as Applied to Continuous Production and Lot-by-Lot Inspection; Continuation of Sampling Theory and Special Applications of Statistical Techniques of Textile Quality Control Problems.

Registration fee for the course is $160 per person. This includes tuition and books but does not include living accommodations or meals. Registration can be made with D. B. Stansel, P. O. Box 5125, State College Station, Raleigh, N. C.

T.R.I. Plans Meeting

New horizons in textile fibers and technology will be featured at Textile Research Institute's 30th annual meeting at the Hotel Commodore, New York City, Thursday and Friday, March 24 and 25. The developments to be discussed are of the type to open new vistas to textile scientists and executives, the institute reports.

Opening the meeting on Thursday will be a presentation of research carried out at T.R.I.'s Princeton laboratories during 1959 to be given by various senior members of the T.R.I. staff. Thursday's featured luncheon speaker will be James H. Wakelin, Assistant Secretary of the Navy for Research and Development.

Subjects to be covered during Thursday will include: "Reversible Crimp in an Acrylic Fiber," by Elijah M. Hicks

Jr., Orlon technical director, textile fiber department, The Du Pont Co., Wilmington, Del.; "SM-27, A Man-Made, High Modulus, Cellulosic Fiber," by Geoffrey V. Lund, director of textile research and development, Courtaulds (Ala.) Inc.; and "Crease Recovery and Wash-Wear Behavior in Cellulosic Fabrics," by Richard O. Steele, head of the textile research laboratory of Rohm & Haas Co., Philadelphia, Pa.

The Friday morning session will feature: "Principles of Nonwoven Fabrics," explored by Stanley Backer, associate professor of mechanical engineering, Massachusetts Institute of Technology, Cambridge, Mass.; "Some Developments in Wool Research in Australia," reported by M. Lipson, chief, division of textiles industry, C.S.I.R.O., Wool Research Laboratories, Geelong, Australia; "Recent Improvements in Textile Processing Machinery and Methods" will be described by Ralph A. Rusca, head, machinery development, Southern Utilization Research & Development Division, U.S.D.A., New Orleans, La.

The Friday afternoon session will be guided by Alfred E. Brown, director of research, Harris Research Laboratories, Washington, D. C., and will open with a paper dealing with fiber developments presented by a representative of Celanese Corp. of America. This is to be followed by a paper on "Recent Developments in Polyvinyl Alcohol Fibers" by Richard D. Wells, market development for Air Reduction Chemical Co.

There will be a $10 registration fee to cover both days of the meeting and tickets for luncheons on Thursday and Friday will be available for $6 each day. Advance reservations may be made by writing to the institute's secretary, P. O. Box 625, Princeton, N. J.

N. C. State Revises Textile Course

North Carolina State College's School of Textiles has announced a major revision of its textile management curriculum. In his announcement, Dean Malcolm E. Campbell said the purpose of the move is to provide textile graduates with a broad understanding of business management in addition to a basic knowledge of textile materials and processes.

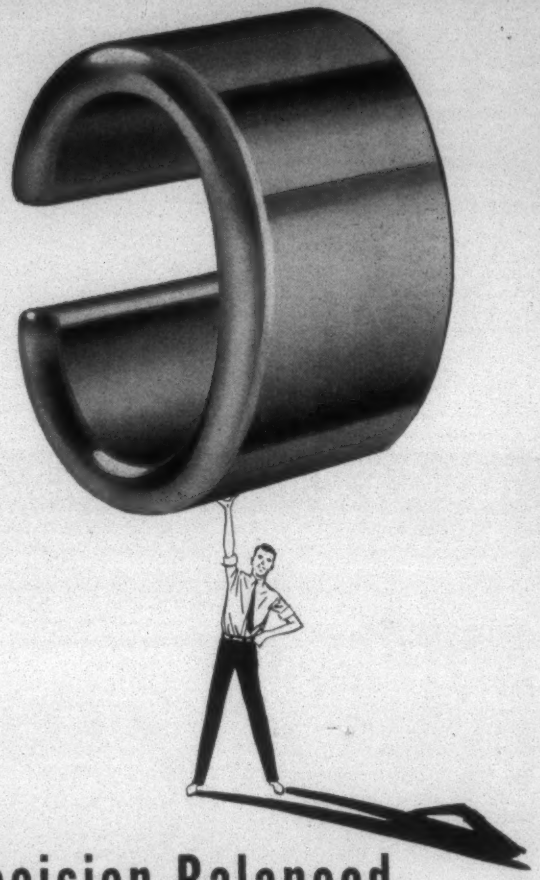
Through courses in basic economics—in areas of production, pricing, marketing and finance—textile students will have an opportunity to familiarize themselves with the principles governing the operation of successful business enterprises.

The revised textile management curriculum "has been planned for outstanding students who have management as their professional goal," Campbell explained. The revision of the management curriculum is one of a number of significant curriculum revisions that are underway, Campbell added. The curriculum will be available to students entering in 1960, and to many already enrolled in the School of Textiles.

Textile Engineering Conference Set

Engineering advances in textile manufacturing and textile improvements that can aid the engineer will be the dual themes of the third annual Textile Engineering Conference at Raleigh, N. C., March 31-April 1. The conference is sponsored by the American Society of Mechanical Engineers. The tentative program is as follows:

Thursday, March 31—9:30 a.m.—"Water Resources and



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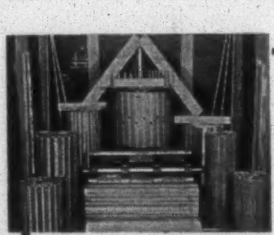

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Stream Polution Control," E. C. Hubbard, North Carolina Department of Water Resources, Raleigh; "Textile Waste Treatment—What to Do About It," J. L. Brown Jr., Cannon Mills Co., Kannapolis, N. C.; Panel Discussion on "Engineering Aspects in Design of Treatment Plants" with the above speakers and C. W. Mengel, William C. Olsen & Associates, Raleigh.

Thursday, March 31—2 p.m.—"Natural Gas in the Textile Industry" by J. Sellers, Bryant Industrial, Cleveland, Ohio; "Maintenance Records Simplified," J. H. Boddie, Mount Vernon Mills Inc., Tallahassee, Ala.; "Some Observations on Textile Automation," C. M. Asbill Jr., School of Textiles, North Carolina State College.

Friday, April 1—9:30 a.m.—"Trends in the Production of Continuous Filament Textured Yarns," by R. E. Wiggins, School of Textiles, N. C. State College; Panel Discussion, "Spinning from Sliver" with R. I. Dalton Jr., Whitin Machine Works, Whitinsville, Mass., H. J. Burnham, Saco-Lowell Shops Research Center, Clemson, S. C., E. Koella Jr., Rockford (Tenn.) Mfg. Co., and F. E. Bozeman, Atkinson, Haserick & Co., Clarksville, Ga.

Smith Named N.C.C. Head

J. Craig Smith, president and treasurer of Avondale Mills, Sylacauga, Ala., has been named president of The National Cotton Council for 1960. Smith succeeds Boswell Stevens, Macon, Miss., who becomes chairman of the council's board of directors. Smith is also a vice-president and director of Cowikee Mills, Eufala, Ala. He is a past president of the American Cotton Manufacturers Institute, the Alabama Textile Manufacturers Association and the Carded Yarn Association.

Other officers chosen by the council are: B. L. Anderson, Fort Worth, Tex.; L. T. Barringer, Memphis, Tenn.; and D. W. Brooks, Atlanta, Ga., all vice-presidents. Aubrey Lockett, Vernon, Tex., was re-elected treasurer and William Rhea Blake, Memphis, was renamed executive vice-president.

Read P. Dunn, Washington, foreign trade director of the N.C.C. told the group that prospects for U. S. cotton in foreign markets is very good for the coming year because of generally better economic conditions abroad.

New members of the board of directors of the Cotton Council International include Houston Jewell, Crystal Springs Bleachery, Chickamauga, Ga.

The Designing Of Pile Fabrics

(Continued From Page 65)

obtained, on each piece, than could be gotten otherwise. The actual pile height can be governed and controlled by the size of the pile gauge wire, different heights requiring different wires.

The need for rocker bars can be seen here. The pile yarn is delivered uniformly on each pick. The cloth does not require much pile yarn between picks one and two, or between two and three. This extra yarn that is delivered is stored, for use between picks three and four, four and five, five and six.

This is still expensive, for ten picks are thrown to get the conventional 6 pick W tuft weave. However, if this extreme height of pile is demanded, that normal weaving cannot supply, the customer will pay for it. In all probability a filament pile yarn would be used because a spun yarn would shed too much.

Promotions, Resignations, Honors, Transfers, Appointments, Elections, Civic and Associational Activities

PERSONAL NEWS

John P. Kendall has been elected a director of the Kendall Co., Boston Mass., to fill the vacancy caused by the death of his father, Henry P. Kendall, company founder and late chairman of the board. Kendall is with the fiber products division of the company.

Cox

Ralph S. Cox has been appointed supervisor of parts sales for Leesona Corp. to succeed Thomas F. Curran who recently retired. Cox joined Leesona's experimental department in 1948 and later was transferred to its research division as project engineer in charge of field tests. He joined the sales division in July of 1958 as administrative assistant, domestic sales.

The Textile Loom Reed Co., Greensboro, N. C., has been incorporated with W. P. (Bill) Anderson as president and treasurer; W. R. McCuiston as vice-president; and Martha C. Anderson, secretary. The only change in personnel is the addition to the staff of McCuiston who will act in a sales capacity.

Anderson

McCuiston

Frederick E. Anderson has joined the fibers division of American Cyanamid Co. as group leader for yarn and fabric development. Anderson will be assigned to Cyanamid's Bound Brook, N. J., plant. Since 1956, Anderson has served in research and product development capacities at the Elizabethton, Tenn., plant of North American Rayon Corp. He also served in production and sales capacities with Frank Ix & Sons Inc. in New York City.

Hugh G. Hurley, superintendent of the Seneca, S. C., plant of Utica-Mohawk, cotton division of J. P. Stevens & Co., has been promoted to manager of the Exposition Plant of Utica-Mohawk, Atlanta, Ga. . . . George O. Porterm has been named superintendent of the Seneca plant succeeding Hurley.

J. Marshall Gayle has become associated with Watson & Desmond Machinery Co. and Watson & Desmond Inc., Charlotte, N. C. For the past six years Gayle was general manager of the Gastonia (N. C.) Weaving Co.

Grover

Prof. E. B. Grover has been named to head the department of textile technology at the School of Textiles, North Carolina State College. The department was recently formed through the merger of the department of fiber and yarn technology and the department of fabric development. Professor Grover previously headed the department of fiber and yarn technology.

At the recent annual meeting of The Association of Cotton Textile Merchants of New York, the following were elected directors for three year terms: Harry M. Ferguson of Dan River Mills; Lewis M. Heflin of Cone Mills Inc.; Harry C. Hoffman of Reeves Bros. Inc.; and Joseph W. Valentine of J. W. Valentine Co.

T. B. Jackson, assistant secretary of J. P. Stevens & Co. and manager of the company's industrial plant in Rock Hill, S. C., and Ragan Plant in Gastonia, N. C., has retired. Jackson was serving with Industrial Cotton Mills Co., Rock Hill, when that organization was acquired by Stevens. At that time he was made assistant secretary and later manager of the Industrial and Ragan plants. . . . Dwayne King, accounting supervisor for the Rock Hill plant group, will assume the financial duties performed by Jackson.

Kenneth C. Horne, general superintendent of the Glasgow plant of James Lees & Sons Co., Bridgeport, Pa., has been named general manager of the Rabun Mills plant at Rabun Gap and the Pine Tree Mills at Dahlonega, Ga. He succeeds Jay Fesperman who has resigned.

Lee Parsons has been transferred to New York City by the American Cotton Manufacturers Institute. Parsons will be acting manager of the New York office. He was previously assistant to the executive vice-president in Washington for five years.

Earle R. Stall Jr. has been named assistant vice-president of Cone Mills Corp., Greensboro, N. C. Stall joined Cone in 1955. Prior to that he was with J. P. Stevens & Co. at its Dunean Plant, Greenville, S. C. Stall will continue in his present position as manager of Cone Mills' American spinning plant, Greenville, S. C., and Florence Plant, Forest City, N. C.

Marcus D. Haney has been named assistant manager of the Southern district office of The Du Pont Co.'s dyes and chemicals division in a series of changes involving sales and technical positions in various district offices of that division. Haney will supervise all Southern district

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sales and technical service on products other than dyes. Other changes in the Southern district, which embraces offices in Charlotte and Atlanta, include the following: Atlanta—J. J. Barnhardt Jr., sales and technical supervisor for dyes; J. H. Stradley named technical consultant, dyes. Charlotte—J. V. Killheffer named technical supervisor, dyes; N. R. Vieira named technical consultant, dyes.

O'Neil

Paul F. O'Neil has been appointed to the chemical research staff of Crown Chemical Corp. of Providence, R. I., to be responsible for the company's manufacturing process development. Formerly a chemist with the research and development staff of Warwick Chemical Co., division of Sun Chemical Corp., O'Neil was most recently a plant chemist for Synthron Inc.

Firestone Textiles, Gastonia, N. C., has announced nine promotions. Francis B. Galligan, superintendent of the cotton division, has been named production manager succeeding Nelson Kessell, who has retired. . . . Francis C. Martin, assistant to Kessell, was named production manager of the synthetics division. . . . Homer G. Hall, assistant to the manager of sales and scheduling, has been named assistant manager of the synthetics division. . . . Phil R. Williams, assistant to the cotton division head, has been named production manager of the cotton division. . . . Clyde E. Moss, assistant to the general superintendent, was named manager of textile developments. . . . Leonard B. McAbee, assistant to the manager of industrial relations, has been named cotton division assistant manager. . . . Alvin V. Riley, safety director, was named assistant manager of industrial relations. . . . Ralph Johnson, recreational director, was named safety director. . . . Bob Purkey, assistant to the recreational director, was named director.

Riegel Textile Corp. has announced that the Johnston, S. C., plant will be headquarters for the fabricating division. Robert Schultheiss, vice-president of Riegel Textile Sales, has been named to head the newly-created fabricating division. . . . D. J. Gray will continue to be general manager of the Johnston plant.

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Richard F. Aurich of Joseph Bancroft & Sons Co. recently received a certificate of service from the American Association of Textile Chemists & Colorists. The award was presented by Weldon G. Helmus, president of the A.A.T.C.C., during a recent New York meeting of the association's Technical Committee on Research, at which time Aurich completed a three-year term as chairman of the association's standing committee on Damage Caused by Retained Chlorine.

Werner von Bergen, associate director of research for J. P. Stevens & Co., has been chosen as the 1960 recipient of the Harold DeWitt Smith Memorial Medal given by Committee D-13 of the American Society for Testing Materials. Von Bergen will be the 11th recipient of the annual award. The medal, donated by the Fabric Research Laboratories Inc., Natick, Mass., is a testimonial to the memory of Harold DeWitt Smith, who pioneered in the engineering approach to evaluation and utilization of textile fiber properties. Von Bergen is located at Stevens' control research laboratory in Garfield, N. J.

Edwin L. Marston has been promoted to New York district sales manager of American Viscose Corp.'s fibers division. Marston succeeds Louis A. Welch, who died recently. Marston joined American Viscose in 1944 as a salesman in the New York district sales office and in 1955 was named assistant manager of that office.

J. A. White has been named general manager of manufacturing for the synthetics division of J. P. Stevens & Co., Greensboro, N. C. White succeeds the late H. R. Turner. White was appointed assistant manager of manufacturing for the synthetics division in 1951 and was made a vice-president in 1952. He has been associated with Stevens since 1929.

McKissick

Ellison S. McKissick Sr., treasurer and director of the Alice Mfg. Co., Easley, S. C., was recently awarded a Woodman's plaque for outstanding service. The award was given for commendable service to community, state and nation. McKissick is a past president of the American Cotton Manufacturers Institute and a past president of the South Carolina Textile Manufacturers Association.

Duncan Nesbitt has been named superintendent of weaving at Pepperell Mfg. Co., Opelika, Ala., succeeding Arch Scroggins who has retired.

Thomas A. Roberts, general manager of the Ellenboro (N. C.) Mills, division of the Massachusetts Mohair Plush Co., has been named vice-president in charge of that division.

Alonzo F. Bonsal of Joshua L. Baily & Co. Inc., was re-elected chairman of the board of The Association of Cotton Textile Merchants of New York, at the organization meeting of the board recently. W. Ray Ball was re-elected president of the association, and Frank M. Leslie of Burlington Industries vice-president. Lewis M. Heflin of Cone Mills was elected treasurer. John L. Severance was re-elected secretary and Edwin F. Vandervoort assistant treasurer. Appointed to serve with the officers as an executive committee were Marvin R. Cross of Greenwood Mills, Gerrish H. Milliken Jr., of Deering Milliken & Co., and John J. Moran of Pepperell Mfg. Co. Inc.

Glenn H. Pless has joined the Callaway Mills Co., LaGrange, Ga., as a trainee at its Manchester Plant. Pless is a graduate of Auburn with a degree in business administration.

John L. Hallett has been named general manager of Springs Cotton Mills, Lancaster, S. C. Hallett succeeds William C. Summersby who has retired after 45 years in the industry. Summersby joined Springs in 1940 as general manager of the Gayle,

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Eureka and Springsteen Plants in Chester, S. C. He was named executive vice-president in charge of Ware Shoals Mfg. Co. by Riegel Mfg. Co. in 1942 and became president of Ware Shoals before leaving it in 1948 to rejoin Springs. At the time of his retirement Summersby was also vice-president in charge of greige goods.

Malcolm C. Graham has been appointed a New York sales representative for the chemical division of General Mills, Minneapolis, Minn. Graham will headquarter at the division's sales and service office in New York City. Previous to joining General Mills, Graham was associated with American Cyanamid Co. in purchasing and sales. He will be responsible for the sale of General Mills Versamid polyamide resins, Genamid liquid co-reactants, fatty nitrogen chemicals, GenEpoxy epoxy resins, and other organic specialty chemical products.

A. U. (Buck) Priester, executive vice-president and director of research and development at Callaway Mills Co., LaGrange, Ga., was recently presented with the Silver Beaver Award, highest honor in scouting. The award was presented to Priester as president of the West Georgia Council.

E. A. Freeman, chief chemist of the Trion (Ga.) Division of Riegel Textile Corp., has been named overseer of finishing. He succeeds D. C. Alexander who has resigned. . . . William E. Inabnit, who has been with Riegel development laboratories at Ware Shoals, S. C., has been named chief chemist for the Trion Division.

Carpenter

Jack B. Carpenter Jr. has joined the sales staff of Polymer Southern, a division of Polymer Industries Inc., Greenville, S. C., as technical sales representative. Carpenter will make his headquarters in Polymer Southern's offices in Greenville. He will represent the company throughout the states of Virginia and North Carolina.

Forbes Bradley, vice-president of West Point (Ga.) Mfg. Co., retired recently after 31 years of service. Bradley joined Columbus Mfg. Co., then a West Point subsidiary, in 1928 as assistant secretary and treasurer. In 1932 he was elected vice-president and in 1952 became president. When Columbus became an operating division of West Point in 1958, Bradley was named a vice-president.

R. Grady Rankin, retired president of Superior Yarn Mills, Mt. Holly, N. C., has been awarded the Brotherhood Award, given annually to the outstanding person in Gastonia, N. C., who has done the most to promote harmony among the various religious faiths.

F. N. Howard, overseer of spinning department 10 of Judson Mills, Greenville, S. C., division of Cotwool Mfg. Corp., has been promoted to general overseer of spinning department 13. . . . J. R. Thornton, assistant overseer of spinning department 13, third shift, has been promoted to overseer of spinning department 10. . . . D. C. Wright was promoted from trainee to assistant overseer, department 10, second shift. . . . R. B. Simmons was transferred from assistant overseer of spinning department 10, second shift, to assistant overseer spinning department 13, third shift.

H. Russell Lester Jr. has been named overseer of the cloth room and the finishing department of the Lindale, Ga., plant of Pepperell Mfg. Co. Lester succeeds Robert B. Van Tassell, who has resigned to accept a position with Jefferson (Ga.) Mills. . . . Barry E. Smith has been named assistant overseer of the cloth room and finishing department.

Elsinger

J. H. Elsinger has been appointed district manager of a new sales district for Signode Steel Strapping Co. to have its headquarters at Jacksonville, Fla. . The area to be covered by the new district is made up of Florida and the southeast portions of Georgia and South Carolina. Elsinger has had extensive and diversified experience in materials handling, packaging and carloading methods.

Ted W. Palmer has been appointed product manager handling chelating agents by The Dow Chemical Co., Midland, Mich. Palmer will be responsible for the sales programing of Versene chelating agents and Separan flocculants. Palmer joined Dow in 1957 and has been a technical salesman on Separan, Versene and Dowex ion exchange resins.

Quittman M. Rhodes has been appointed sales manager, and Clyde N. Whitesides has been appointed Southern district manager for the textile chemicals department of American Cyanamid Co., New York City. Rhodes joined Cyanamid in 1940 as a technical service representative for the company's specialty products department. In 1958 he was named Southern district manager for the textile chemicals department. Before joining Cyanamid he was associated with the Union Bleachery Co. in Greenville, S. C. Whitesides joined Cyanamid as a sales trainee in 1949 following his graduation from North Carolina State College in Raleigh. He has been a salesman for the company's textile chemicals department in Charlotte, N. C., since 1950.

L. H. Shingle, founder of the L. H. Shingle Co., left recently on a round-the-world trip to visit many of the foreign representatives of the Graton & Knight Co. and the Chas. A. Schieren Co., divisions of the Shingle Co.

Dr. Joel Lindberg, assistant director of the Swedish Institute for Textile Research in Gothenberg, Sweden, will join the Textile Research Center of the School of Textiles at North Carolina State College on July 1. Dr. Lindberg will remain at Raleigh for at least two years, with the possibility that he will remain in the U. S. permanently. While at N. C. State College, he will be engaged in the development of Textile Research Center's new and broadened program of basic textile research.

D. Jack Davis has been appointed to The Dow Chemical Co.'s New York City fibers sales office. Davis will be area manager for market research in New York. He has been with Dow's textile fibers department at its Williamsburg, Va., headquarters for three years. Davis is a graduate of Georgia Tech with a M.S. degree in textile engineering.

OBITUARIES

Julian Butler, 61, vice-president in charge of manufacturing at Morgan Cotton Mills, Laurel Hill, N. C., died recently. His widow, a daughter and a son survive.

Daniel McLeod Culp, 49, district manager in Greensboro, N. C., for Steel Heddle Mfg. Co., died February 17 in a Greensboro hospital. Mr. Culp had been in the company's sales department for 12 years. He was named district manager of the Greensboro territory in 1955. Surviving are his widow, a daughter and two sons.

Clay Williams Davidson, 60, retired industrial personnel director for Mooresville (N. C.) Mills, died at his home in Mooresville, February 2. Survivors include his widow and two sons.

Paul C. Debry, 79, retired president of Duplan Silk Co., predecessor of the Duplan

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Corp., Winston-Salem, N. C., died February 12. Mr. Debry joined Duplan in 1918 as vice-president. In 1923 he was elected president and served in that capacity until 1937. He served as chairman of the board until his retirement in 1939.

Edmond James Lindsay, 51, vice-president and director of Francis Mfg. Co., Roebuck, S. C., and Kentucky Woven Label Co., Allensville, Ky., died February 9 in a Greenville, S. C., hospital.

Joseph Carroll Magarahan, 71, former textile executive, died last month after a brief illness. Mr. Magarahan joined the Florence Mills, Greenville, S. C., in 1927 as assistant treasurer. Florence later became a part of Cone Mills Co. At the time of his retirement in 1954 Mr. Magarahan was treasurer. Survivors include his widow, a daughter and a son.

Edward Sauvain, 77, for many years assistant treasurer of Cannon Mills Co., Kannapolis, N. C., died February 8. Mr. Sauvain joined Cannon Mills about 1910. He later became secretary-treasurer of Imperial Cotton Mills, Eatonton, Ga., and secretary-treasurer of Social Circle (Ga.) Cotton Mills. Later he rejoined Cannon Mills as assistant treasurer. His widow, two daughters and a son survive.

Ellison A. Smyth, 57, former president of Balfour (N. C.) Mills and past president of the North Carolina Textile Manufacturers Association, died February 13 in a Charlotte, N. C., hospital after a short illness. Mr. Smyth was a trustee of the Institute of Textile Technology, Charlottesville, Va. Survivors include his widow and three sons.

Jacob Neely Summerell, 62, vice-president and general manager of the LaFar chain of mills, Gastonia, N. C., died recently in a Gastonia hospital. Mr. Summerell joined LaFar in 1953 as vice-president and general manager. He had previously been associated with Cramerton (N. C.) Mills. He leaves his widow.

Richard A. Willis Sr., 89, formerly executive vice-president and treasurer of Manetta Mills at Lando, S. C., died recently. Mr. Willis had retired from the firm ten years ago. He was a member of the board at the time of his death. He is survived by his widow, two daughters and four sons.

MILL NEWS

CONSTRUCTION. NEW EQUIPMENT. FINANCIAL REPORTS. CHARTERS. AWARDS. VILLAGE ACTIVITY. SALES AND PURCHASES

NEW YORK, N. Y.—Collins & Aikman Corp. has taken over the designs for the production of Trilok upholstery fabrics for the automobile industry under license from U. S. Rubber Co. Trilok is a three-dimensional fabric produced with polyethylene yarns. Collins & Aikman is currently producing to meet the contracts for upholstery for 1960 model cars and has begun planning for the 1961 models. U. S. Rubber will continue its development and sales effort on behalf of Trilok but will discontinue production of these fabrics.

DURHAM, N. C.—Erwin Mills has reported net profit of $436,413 on sales of $14,853,059 for the three months ended December 31. This compares with net profit of $139,781 on sales of $15,729,509 for the comparable period in 1958. Profit before taxes was $946,413 in the most recent period and $303,872 in the previous year.

BOSTON, MASS. — The Kendall Co. has reported a net profit of $5,154,000 on sales of $110,733,000 for the year ended December 26. This compares with earnings of $3,805,000 on sales of $103,382,000 in the previous year. Richard E. Higgins, president, said that the higher sales and earnings reflected the general economy and the recovery of the textile industry as well as the first fruition of the steps the company has taken to improve its plants and strengthen its organization.

BUFFALO, S. C. — Union Buffalo Mills has ordered four Whitin Axi-Flo Model B cleaners.

ALTAVISTA, VA.—Altavista Weaving Co. announced a building program which involves the erection of a two-story addition to provide more office space, construction of additional warehouse facilities, modernization and improvement of an existing weave room and renovation of part of the existing structure's front. Completion of the project is expected in the Summer.

BRIDGEPORT, PA.—The boards of directors of James Lees & Sons Co. here and Burlington Industries Inc., Greensboro, N. C., have approved a plan for a combination between them. The plan will be submitted to Lees stockholders for approval. Under the plan, Lees common stockholders would receive 2⅓ shares of Burlington common stock for each share of Lees common stock held and the outstanding shares of Lees preferred stock would be redeemed. If the plan is approved, Lees business and operations will continue in a wholly-owned subsidiary of Burlington under its present name. Present management, personnel and locations will be retained. Lees' sales for 1959 totalled $83,800,000, an increase of 23% over the previous year. Earnings per share in 1959 were estimated at $6.05 as compared with $4.55 in 1958.

NEW YORK, N. Y.—Burlington Industries Inc. reports a sales increase of 13.6% and a profit increase of more than 100% for the first fiscal quarter of the current year, as compared with the first fiscal quarter of 1959. For the three months ended January 2, net earnings were $9,193,000. This compares with net earnings of $4,248,000 in the three months ended December 27, 1958.

LEXINGTON, N. C.—Erlanger Mills here has ordered five Model J6 combers and eight deliveries of Even Draft drawing from Whitin Machine Works, Whitinsville, Mass.

PACOLET, S. C.—Pacolet Mfg. Co. has shown a profit increase of almost 500% for the fiscal year ended November 29 as compared with the previous fiscal year. Net earnings for fiscal 1959 were $1,429,233, as compared with $291,111 in the previous fiscal year. The company does not disclose sales figures.

GREENSBORO, N. C.—J. P. Stevens & Co. has announced the formation of a yarn sales department to handle all yarn sales of the company. For the past two years Stevens has been selling yarns directly in the South.

WEST POINT, GA.—West Point Mfg. Co. has been awarded a contract for green hand towels by the Military Clothing & Textile Supply Agency of the Philadelphia Quartermaster Depot. The contract calls for 168,192 towels at a total dollar value of $49,072.53.

PROVIDENCE, R. I.—Leesona Corp. here has received orders for Unifil loom winders from: Tallassee Mills, Talladega, Ala.; and the Haynsworth Mill of Woodside Mills, Anderson, S. C. The winders are to be used for the preparation of cotton and synthetic filling yarn.

KNOXVILLE, TENN. — Jefferson Woolen Mills has ceased taking orders and has notified its workers that their services probably will not be needed after orders already booked are completed. Whether or not the mill would continue its operation had not been definitely decided at the time of the notification. The mill's situation is blamed on the low-priced woolen goods imported into the U. S.

GASTONIA, N. C.—The Orlon spinning plant of Delaine Worsted Mills here has installed new Turbo stapler, winding and overhead cleaning equipment valued in excess of $40,000. The new machinery marks the fourth expansion since the plant was erected in 1948. Delaine sells natural and dyed Orlon yarn for knitting and weaving trades.

ROCKINGHAM, N. C. — The number of employees at the Martha Baum Plant of J. P. Stevens & Co. will be doubled "as the business develops," according to Robert T. Stevens. Stevens made his remarks while visiting the plant recently.

ATLANTA, GA.—J. P. Stevens & Co. has assumed active management of Exposition Cotton Mills Co. here. Exposition has been made a part of the Utica-Mohawk Group of the cotton division. Exposition's title was transferred to Stevens January 23.

GREENSBORO, GA. — A modernization program costing "in excess of a half-million dollars" is nearing completion at the Mary-Leila Cotton Mills. The program involves new equipment and other improvements in the opening, carding and spinning departments of the mill. The final phase of the program calls for the installation of 11,040 spindles of warp spinning. The company said that these investments were necessary in order to retain the markets for its products and continue regular operating. Mary-Leila now employs 300 workers and provides a payroll of approximately $1,000,000 annually.

UNION, S. C.—Monarch Mills showed a net profit of $913,511 in the fiscal year ended November 29, as compared with $496,071 in the previous fiscal year. The company does not disclose sales figures. On November 29, total current assets were listed at $12,270,909 against $9,929,793 at the end of fiscal 1958. Total current liabilities were $2,158,510 compared with $1,322,024 previously.

PHILADELPHIA, PA.—The Military Clothing & Textile Supply Agency of the Philadelphia Quartermaster Depot has awarded two contracts for cotton sheets. Contractors, quantity and dollar value are as follows: Pacific Mills Domestics, division of M. Lowenstein & Sons Inc., New York City, 58,500, $94,754.65; and B. I. Cotton Mills, division of Burlington Industries, Greenville, S. C., 80,000, $130,496.

SYLACAUGA, ALA.—Avondale Mills here will hold its annual Spring inspection and open house April 25-27 and May 2, according to J. Craig Smith, president. The Pell City and Birmingham, Ala., plants will be visited April 25; the Sylacauga and Sycamore, Ala., plants will be visited April 26; and the plants in LaFayette and Alexander City will be visited on April 27. The Stevenson, Ala., mill will be visited on May 2.

NEW YORK, N. Y.—Indian Head Mills reports a consolidated net profit of $3,502,000 on sales of $56,154,000 for fiscal 1959, ended November 28. This compares with a profit of $2,331,000 on sales of $43,175,000 in 1958. Profits include non-recurring incomes of $862,000 in 1959 and $886,000 in 1958. Total assets increased in 1959 from $16,013,000 to $27,007,000. Working capital increased from $6,917,000 to $14,971,000. This doubling of working capital was the result of increased earnings, liquidation of non-productive assets, sale and leaseback of two mills and the issue of long-term notes in connection with the acquisition of The Linen Thread Co. and its acquisition of the Textile Thread Co. Indian Head now has about 4,800 employees.

BRUNSWICK, N. C.—The National Spinning Co.'s new $1½ million plant here had its formal opening recently with a Saturday open house and luncheon.

SPARTANBURG, S. C.—A $100,000 changeover and modernization program is nearing completion at Beaumont Mills here, a unit of the Spartan Mills. The program includes a new 25,000-square-foot cloth room, the installation of three new slashers and the installation of 120 Unifil units.

NEW YORK, N. Y.—An agreement for the purchase of Hoosac Mills Corp. by Indian Head Mills from Associated Textile Cos., the sole owner, was announced recently by both firms. The agreement is subject to ratification by the trustees of Associated. Financial details were not disclosed. Operations of Hoosac will continue at North Adams, Mass., under the present management with William M. Butler, president, as division manager. At the closing date, the merchandising and selling functions will be assumed by Indian Head Mills at 111 West 40th Street, New York City. Hoosac produces filament rayon and acetate fabrics including linings, taffetas and twills which are distributed to the converting trade.

GREENSBORO, N. C.—Cone Mills Corp. showed an increase of 80% in its net profits for the year ended December 31 as compared with the previous year. Sales for the year increased by 14.7%. Net profit for 1959 was $5,277,874 on sales of $190,333,764 as compared with profit of $2,957,074 on sales of $165,886,704 in 1958. The net profit includes a net gain realized on the sale of non-manufacturing properties amounting to 11 cents a share in 1959 and 13 cents a share in 1958.

NEW YORK, N. Y.—Net profit of $737,333 on sales of $28,393,509 has been reported by Riegel Textile Corp. for the 16 weeks ended January 23. This compares with net profit of $265,435 on sales of $26,648,388 in the comparable period of the previous fiscal year. Before income taxes, profit was $1,594,433 as compared with $571,935 in the previous comparable period.

GRANITEVILLE, S. C. — The Graniteville Co. has reported a better than 100% increase in net profit for the year ended January 2. Profit for the period was $2,070,111 on sales of $64,079,388. This compares with net profit of $895,076 on sales of $52,732,358 for the previous year. During 1959 Graniteville manufactured 105,149,013 yards of fabric as compared with 97,601,312 yards in 1958. The company consumed 134,109 bales of cotton in the year as compared with 122,927 in the previous year.

MAIDEN, N. C.—The standards and controls office and central laboratory of Carolina Mills Inc. will move into a building formerly occupied by Southland Fabrics here. A part of Carolina's other offices, now located in Newton, will also be moved. The standards and controls office is now located at Carolina Mills Plant No. 3 in Newton. The company also recently acquired a plant in Lincolnton, N. C. Making Maiden headquarters will centralize an important part of the mills' operation since Maiden lies between Newton and Lincolnton. Future plans are said to call for a pilot plant production unit of Carolina at the Maiden location. The unit would be used in conjunction with the central laboratory in making special sample lots of fiber blends not in normal production.

NEW YORK, N. Y.—Amerotron, textile division of Textron Inc., reported sales of $67,346,000 for the year ended January 2. Pretax earnings for the period totalled $5,190,000.

WEST POINT, GA.—West Point Mfg. Co. has agreed to purchase the property and buildings in Newnan, Ga., formerly owned by Mount Vernon Mills, Baltimore, Md. The former Mount Vernon property is now owned by Ben Comer of C. & H. Enterprises of Atlanta. West Point plans to transfer certain yarn making machinery from other locations to the Newnan Mill. Operations are expected to start about mid-Summer. Some 250 persons will be employed.

GREENWOOD, S. C.—The third floor card room of Abney Mills' Panola Mill here was damaged by an explosion and following fire recently. No one was injured in the incident and no damage estimate was given. Origin of the explosion was not immediately known. Damage was confined mostly to yarns in the card room and water damage in other sections of the plant. Some 282 persons are employed at the plant.

NEW YORK, N. Y.—Net operating earnings of Dan River Mills in 1959 showed a gain of almost 33% over net earnings from operations in the prior year on about an 8% increase in sales, according to W. J. Erwin, president. For the year ended January 2, net operating profit rose to $7,073,330 in comparison with net operating earnings of $5,330,430 the previous year. Consolidated net sales in 1959 increased to $173,738,686, an all-time high for Dan River, and compared with sales volume of $161,318,396 in the prior year. Erwin said the sales of finished fabrics produced in the Danville Division and the unfinished cloth manufactured by Woodside Mills, a subsidiary, both showed encouraging gains. Commission sales of Iselin-Jefferson Co., and the volume of business factored by Iselin-Jefferson Financial Co., while not included in Dan River's consolidated sales, also increased. The company reports that all divisions entered the year with a strong backlog of unfilled orders.

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textile bulletin

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TEXTILE BULLETIN is devoted to the dissemination of information and the exchange of opinion relative to the spinning and weaving phases of the textile industry, as well as the dyeing and finishing of yarns and woven fabrics. Appropriate material, technical and otherwise, is solicited and paid for at regular rates. Opinions expressed by contributors are theirs and not necessarily those of the editors and publishers. ¶ Circulation rates are: one year payable in advance, $1.50; two years payable in advance, $2.00; one year, Canada, $3.00; one year, other countries in Postal Union, $5.00; single copies, 25 cents. ¶ A companion monthly journal, THE KNITTER, is published by Clark Publishing Co. and devoted to the interests of the knitgoods manufacturing industry.

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What's Next In The Import Pickle?

LAST year at this time the textile industry was openly optimistic at its chances for some measure of relief from low wage imports. It was beginning to look like Washington officialdom might pay more heed to the urgent pleas the textile industry had been sounding for many months. The report of the Pastore subcommittee had painstakingly been compiled, and its recommendations bore out the industry's contention that many of its ailments were the direct result of various policies of the Government. At worst the outlook appeared at least more promising than it had for some time.

Now, a year later, despite the fact that the import situation is infinitely more critical, it appears obvious that little if any serious consideration has been given to it at all. As far as Washington bureaucrats are concerned the textile industry remains a bumbling ox that can't find its way to market. It can't diagnose its own ailments, let alone cure them. It doesn't know what it needs, and it covers up its multitude of shortcomings with a chorus of complaints that defy substantiation.

That this is the official attitude prevailing in important Government quarters can be seen in the recent remarks of Assistant Secretary of Commerce Henry Kearns. Speaking February 22nd before the Charlotte Textile Club, he made it quite clear that he and his Department are satisfied that there is no real correlation between the health of the domestic textile industry and the volume of imports. No, he advised, imports are not really the problem they seem to be. Conceivably they could become a problem, he admitted, but the Government will surely see that this never comes to pass.

The real problems of the domestic textile industry, according to the secretary, are inter-industry problems. For one thing, he cited the industry's inability to balance its production with market demand. The industry simply makes more than it can sell at a profit, he advised. And does this justify still a further flooding of the market by imports?

(Members of the Charlotte Textile Club listened in disbelief to the Secretary's analysis. You'll be interested in reading it yourself on page 41. Virtually the entire text is carried because it sheds much light on the impractical processes by which decisions apparently are reached in Washington.)

Still another example of the Government's "you're not being hurt by imports" attitude is President Eisenhower's refusal to broaden the scope of the Federal Trade Commission's hearing to determine whether or not a tariff adjustment should be made to equalize the differences in raw cotton costs in this country and overseas. The President on February 24th turned thumbs down on any possibility of widening the scope of the hearing. Reviewing its past fortunes, the industry will be fortunate to eke out any gain at all from the hearings, limited though they are.

It's ironic that last year's upturn in textile sales and profits are now being cited by free trade exponents as sufficient proof that the textile industry is not as hobbled by the Government's free trade policies as the industry would have you believe. From the emphasis being given to last year's improved earnings, you'd be tempted to conclude that textile stocks were better investments than shares in Fort Knox might have been. But nobody seems to make much of the fact that earnings are still far, far below the level of over-all industry.

No matter how bitterly you react to the conclusions put forward by those forces working against the industry, the fact remains that there really is no point in castigating them. What the industry needs now to do is renew and redouble its efforts to get its story across in the right places—and as quickly as possible. The refusal of the Eisenhower Administration to accept the validity of the industry's complaints must be accepted for what it is—an indictment of the manner in which the industry has sought to substantiate the seriousness of its plight.

Facing the issue squarely, what else is there for the industry to do? The last resort, of course, is to seek remedial legislation. That course, if ever it must be taken, will prove even rougher than the one now being futilely pursued. The textile industry simply could not muster enough support in Congress to push through the kind of bill it would take to revise current trade policies. The industry is too sectionalized to exert the influence it would take to push such a measure through. The day may be coming when other import-weakened industries can band together with the textile industry in such a fight. But until then the textile industry must accept the fact that its battle with the Kearnses must not be abandoned.

Conditions Are Unchanged

J. Craig Smith

I was asked a few days ago what I was going to tell the officials I have been dealing with in Washington now that Avondale's earnings and earnings of the textile industry generally have taken a turn for the better. The answer is that I am going to tell them the same thing I have been telling them.

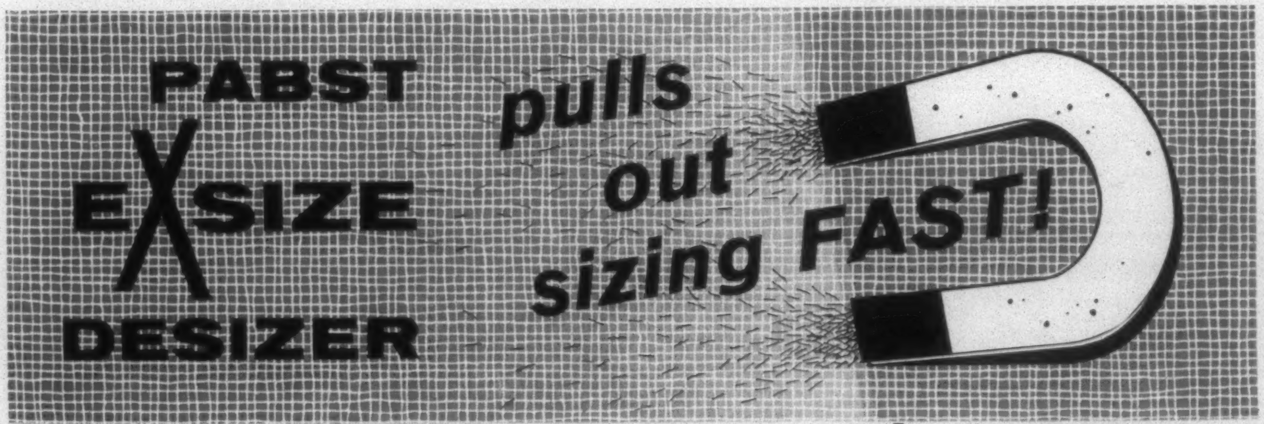
Our case is not based on financial need, nor are we appealing for anybody's sympathy. We are not asking for any special favors, and certainly the last thing we want is a handout from our government. We want fair and equal treatment under the law, and that is all we want.

(1) We don't think it is fair and equal treatment to require us, by law, to pay a minimum wage of $1 an hour and then to permit our foreign competition to pay as little as 10 cents an hour and undersell us in our own country.

(2) We don't think it is fair and equal treatment to require us to pay the government support price for our cotton and for our own government to sell similar cotton to our foreign competitor at a 25% discount, and then permit our foreign competitor to take our home market purely because of his cheap cotton and cheap labor.

The average wage rate here at Avondale and in the industry generally is substantially more than $1 per hour. Our minimum wage is $1.25 per hour. So far as I am concerned, if the government would levy a tariff on foreign textiles which would have the effect of getting their labor cost up to $1 an hour and getting their cotton cost up to the price we are required by law to pay, I would be willing to take our chances in holding a highly competitive market. I don't believe the foreigner can take this market if he has to observe the same legal ground rules that we do.

The color of the ink our bookkeepers use from day to day should have no bearing on our petition for fair treatment. The cold facts are that for the long pull, unless the labor cost of our foreign competitor is equalized by a tariff at least up to the legal minimum and unless his raw material cost is equalized by a tariff up to the U. S. legal support price, this great American industry won't be needing any ink at all.—J. Craig Smith, President, Avondale Mills, *The Avondale Sun*, January 25, 1960.



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TEXTILE INDUSTRY SCHEDULE

Mar. 1-4 (Tu-F)—Spring meeting, **COMMITTEE D-13, A.S.T.M.**, Sheraton-Atlantic Hotel, New York City.

Mar. 10-11 (Th-F)—Spring meeting, **THE FIBER SOCIETY**, Roosevelt Hotel, New Orleans.

March 12 (Sa)—Spring meeting, **PIEDMONT DIVISION, SOUTHERN TEXTILE ASSOCIATION**, Johnston Memorial Y.M.C.A., Charlotte, N. C.

Mar. 24-25 (Th-F)—Spring technical meeting, **TEXTILE QUALITY CONTROL ASSOCIATION**, Dinkler Plaza Hotel, Atlanta.

Mar. 24-25 (Th-F)—Annual meeting, **TEXTILE RESEARCH INSTITUTE**, Hotel Commodore, New York City.

Mar. 31-Apr. 1 (Th-F)—Textile Engineering Conference, **AMERICAN SOCIETY OF MECHANICAL ENGINEERS**, North Carolina State College, Raleigh.

April 1 (F)—Spring meeting, **SOUTH CAROLINA DIVISION, SOUTHERN TEXTILE ASSOCIATION**, Easley High School, Easley, S. C.

Apr. 7-9 (Th-Sa)—Annual meeting, **AMERICAN COTTON MANUFACTURERS INSTITUTE**, Americana Hotel, Bal Harbour, Fla.

Apr. 20-21 (W-Th)—Annual meeting, **ALABAMA TEXTILE MANUFACTURERS ASSOCIATION**, Buena Vista Hotel, Biloxi, Miss.

April 23 (Sa)—Spring meeting, **NORTHERN NORTH CAROLINA-VIRGINIA DIVISION, SOUTHERN TEXTILE ASSOCIATION**, Morehead High School, Spray, N. C.

Apr. 26-27 (Tu-W)—Technical Advisory Committee meeting and Board of Trustees meeting, **INSTITUTE OF TEXTILE TECHNOLOGY**, Charlottesville, Va.

Apr. 29-30 (Th-Sa)—The 59th annual convention, **PHI PSI FRATERNITY**, Hotel Roosevelt, New York City.

April 30 (Sa)—Spring meeting, **EASTERN CAROLINA DIVISION, SOUTHERN TEXTILE ASSOCIATION**, N. C. State College, Raleigh.

May 2-13—Short course, **STATISTICAL QUALITY CONTROL**, School of Textiles, N. C. State College, Raleigh.

May 4-5 (W-Th)—Open House, **A.C.M.I. FIBER TESTING LABORATORY**, The Clemson House, Clemson, S. C.

May 11-14 (W-Sa)—Annual outing, **CAROLINA YARN ASSOCIATION**, Pinehurst, N. C.

May 19-21 (Th-Sa)—The 60th anniversary meeting, **GEORGIA TEXTILE MANUFACTURERS ASSOCIATION**, Diplomat Hotel and Country Club, Hollywood, Fla.

May 23-27 (M-F)—**AMERICAN TEXTILE MACHINERY EXHIBITION**, Atlantic City, N. J.

May 26-28 (Th-Sa)—Annual meeting, **SOUTH CAROLINA TEXTILE MANUFACTURERS ASSOCIATION**, The Cloister, Sea Island, Ga.

May 31-June 2 (Tu-Th)—11th Annual **COTTON RESEARCH CLINIC** (sponsored by The National Cotton Council), Grove Park Inn, Asheville, N. C.

June 6-17—Short course for **EXECUTIVES OF THE TEXTILE INDUSTRY**, School of Textiles, N. C. State College, Raleigh.

June 23-25 (Th-Sa)—52nd annual convention, **SOUTHERN TEXTILE ASSOCIATION**, The Grove Park Inn, Asheville, N. C.

Sept. 8-9 (Th-F)—Fall technical meeting, **TEXTILE QUALITY CONTROL ASSOCIATION**, The Clemson House, Clemson, S. C.

Sept. 8-9 (Th-F)—Annual meeting, **COMBED YARN SPINNERS ASSOCIATION**, The Cloister, Sea Island, Ga.

Sept. 15-16 (Th-F)—Textile Processing Symposium, **AMERICAN GAS ASSOCIATION**, Sedgefield Inn, Greensboro, N. C.

Sept. 15-16 (Th-F)—Annual outing, **CHATTANOOGA YARN ASSOCIATION**, The Read House, Chattanooga, Tenn.

Sept. 27-28 (Tu-W)—The ninth annual **CHEMICAL FINISHING CONFERENCE**, sponsored by the National Cotton Council, Statler Hotel, Washington, D. C.

Sept. 28-30 (W-F)—Annual meeting, **NORTH CAROLINA TEXTILE MANUFACTURERS ASSOCIATION**, Carolina Hotel, Pinehurst, N. C.

Oct. 3-8 (M-F)—The 21st **SOUTHERN TEXTILE EXPOSITION**, Textile Hall, Greenville, S. C.

Oct. 18-21 (Tu-F)—Fall meeting, **COMMITTEE D-13, A.S.T.M.**, Sheraton-Atlantic Hotel, New York City.

Oct. 19-22 (W-Sa)—Annual meeting, **CARDED YARN ASSOCIATION**, The Grove Park Inn, Asheville, N. C.

(M) Monday; (Tu) Tuesday; (W) Wednesday; (Th) Thursday; (F) Friday; (Sa) Saturday

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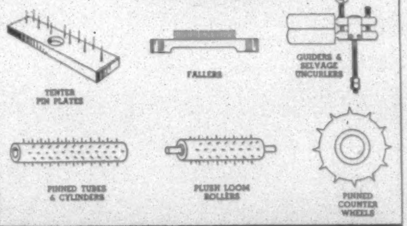

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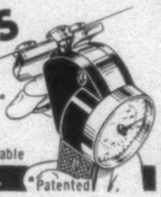

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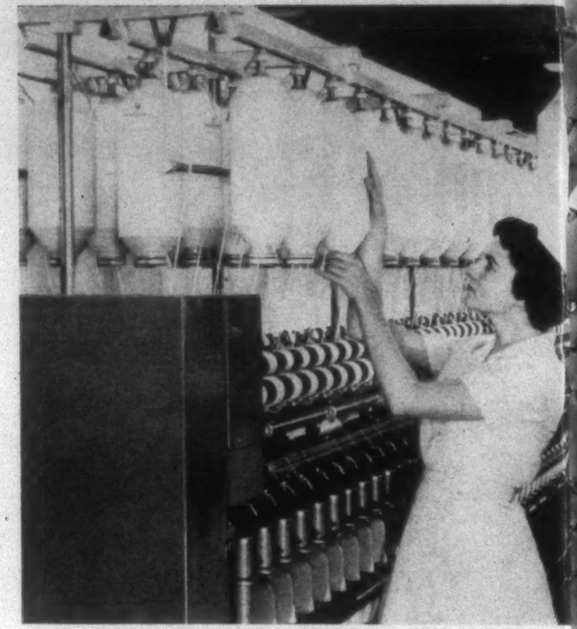

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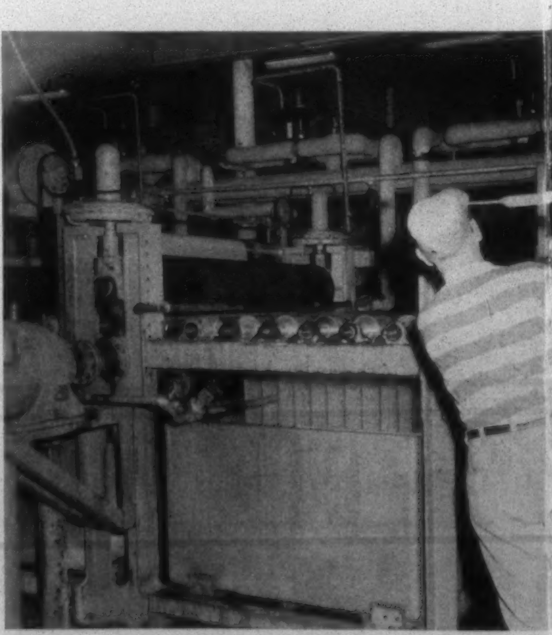

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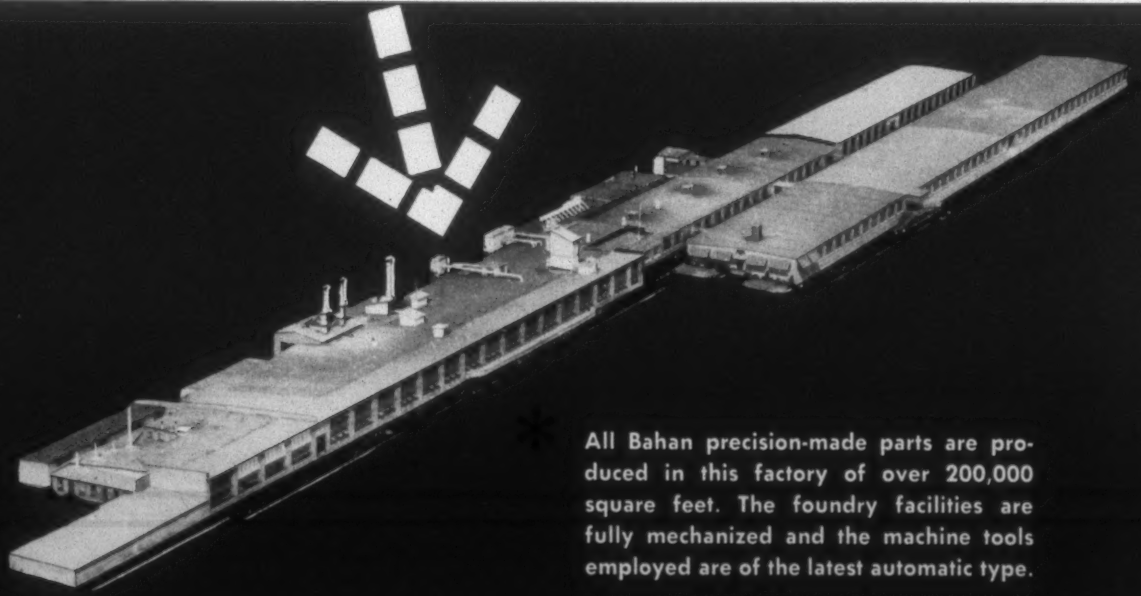

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